Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

August 17, 1959

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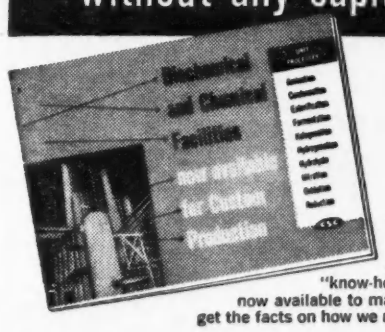

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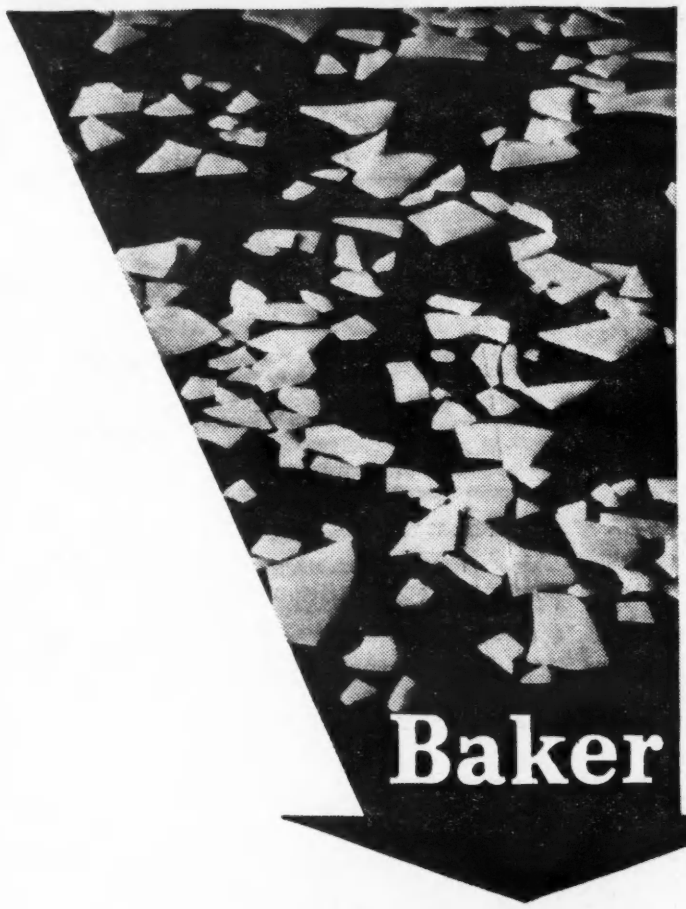
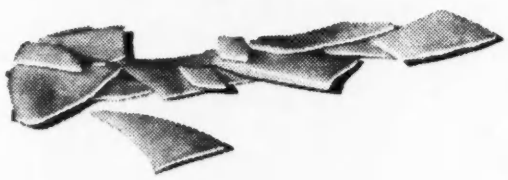


Here's news!

Baker CALCIUM NITRATE, Tech.
ZINC NITRATE, Tech.

in THIN FLAT FLAKES



- *Faster dissolving*
- *Uniform purity—lot after lot*
- *Controlled water of hydration*
- *Easier to handle*

Look over the photograph above, reproduced to actual size. Note the thin flakes with large surface area. THIN FLAKES go into solution FAST – you save time and money. They are easy to handle. These chemicals in *flake* form represent another Baker first.

Latex processors gain better control of coagulation because of the controlled high assay and known water of hydration. This uniform purity, controlled pH and freedom from extraneous matter insure better quality in your finished goods with fewer rejects.

These chemicals are produced to meet precise specifications. In the informative typical analysis shown below, note the very low ammonium nitrate content in Baker Calcium Nitrate. The exceptionally low copper and manganese contribute to longer life for your latex products, with less tendency to oxidize and become brittle or too soft.

These features of Baker Calcium Nitrate and Zinc Nitrate also are helpful to manufacturers of rustproofing specialties, textile finishes, pigments, adhesives and lithographic materials.

Because of the low melting points and deliquescent nature of these chemicals, they are packaged with polyethylene liners and are stored in an air conditioned warehouse at a temperature below 85°F.

Write for samples and prices for these new *flaked* products, Calcium and Zinc Nitrate Technical.

CALCIUM NITRATE, Technical Flake — *Typical analysis*

Assay (as $Ca(NO_3)_2$)	70.8 %
Water of Hydration	28.6 %
Insoluble and NH_4OH Ppt.	0.03 %
Ammonium Nitrate (NH_4NO_3)	0.01 %
Magnesium & Alkalies (as NO_3)	0.4 %
Iron (Fe)	0.0003%
Copper (Cu)	0.0004%
Manganese (Mn)	0.001 %
pH of 5% Solution	6.0

Thin (0.025 in.) flakes about ½ inch in size with the following typical mesh analysis:

On U.S. No. 4	45%
Thru U.S. No. 20	8%

ZINC NITRATE, Technical Flake — *Typical analysis*

Assay (as $Zn(NO_3)_2$)	74.2 %
Water of Hydration	25.6 %
Insoluble Matter	0.008 %
Iron (Fe)	0.0001%
Lead (Pb)	0.005 %
pH of 5% Solution	5.1

Thin (0.035 in.) flakes about ½ inch in size with the following typical mesh analysis:

On U.S. No. 4	26%
Thru U.S. No. 20	9%

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AUG 17 1959

Oil, Paint and Drug Reporter

Vol. 176 No. 7 30 Church St., New York 7, N.Y. August 17, 1959

METAL & THERMIT SALES CHIEF: H. W. Buchanan, who has been made manager of its general sales department by Metal & Thermit Corporation, New York.

Monsanto's New Tack: Silicon Metal Facility

Monsanto Chemical Company's inorganic chemicals division has begun building a plant outside its home town, St. Louis, Mo., for the manufacture of ultra-pure silicon metal.

Edward C. McCarthy, manager of the inorganic division's silicon development project, has been named manager of the plant, which is being erected in St. Charles County.

According to Monsanto, the new facility marks the first step in the firm's "long-range plans for maintaining services to and manufacturing chemicals for the nation's growing electronic industry."

Monsanto has been running pilot units for some time and expects to have the plant on stream before the end of the year and to have it operating at design capacity by 1961. No cost or capacity figures were made available by the firm.

Monsanto points out that special groups in the firm are conducting research programs leading to the development of new chemicals and specialty materials for use in the electronics field.

Heading up these groups are Dr. John H. Payne, jr., assistant director of research for the inorganic division, at St. Louis; and Dr. Russell L. Jenkins, associate director, and Dr. R. A. Ruehrwein, section leader, both of the company's re-

—Continued on page 67

Petrochemical Expansion Near Completion in Japan

Mitsui Petrochemicals Industry, Ltd., Iwakuni City, Japan, is completing expansions of its terephthalic acid, ethylene glycol and ethylene oxide plants. The facilities were designed by Scientific Design Company, New York.

Mitsui's terephthalic acid plant, the first-operated plant using Amoco Chemical Corporation's xylene oxidation process, has just been doubled to give a capacity of about 30 million pounds per year.

The original plant went on stream in the fall of 1958, and has been in full operation ever since.

The product is ultimately converted to "Terylene" polyester fiber in Japan under Imperial Chemical Industries licenses.

The ethylene glycol facility, completed over a year ago, has just been doubled to a total capacity of about 20 million pounds per year.

Currently under way is expansion of Mitsui's year-old ethylene oxide plant which utilizes SD's air oxidation process. When completed by the end of 1959, the expanded plant will have a capacity of 26 million pounds of high-purity ethylene oxide per year.

Hazardous Labeling Bill Snags When Labor and Food Interests Pitch In With Special Pleading

The chemical industry's bill for labeling hazardous household substances in the interest of consumer protection has just run into a double snag. Organized labor is now demanding that the proposed law be made broad enough to cover commercial sizes of hazardous products as well as those packaged for home use. But the food and toiletries industries are countering by firmly insisting that they remain subject to regulation only under the food, drug and cosmetic law. They are afraid that if they are placed under a new law the public might draw an erroneous inference as to the safety of their products.

Bill May Be Blocked

The upshot of these developments, which came to light at a one-day hearing last week before the senate interstate commerce committee where only one member — Sen. Vance Hartke of Indiana—showed up, may be to slow down if not block passage of the bill by the senate before adjournment. Sen. Hartke adjourned the hearing without giving any indication as to when the committee might meet on the legislation again.

Of the two objections, that of the food and toiletries industries seems likely to cause the most trouble for the bill. Organized labor's demands, while not wholly unexpected, are largely a reiteration of a position taken by the American Medical Association several years ago when the labeling legislation was proposed.

AMA has since backed off from the idea of covering commercial sizes under the law and did not make an appearance at the senate hearings.

Efforts are currently being made by the Food and Drug Administration and the food and toiletries industries to work out a satisfactory compromise on the issue of exemptions.

FDA Commissioner George P. Larrick told the committee that where the hazardous products labeling law would help FDA in protecting consumers is in connection with the use of aerosol containers in these industries.

Existing law does not provide the FDA with sufficient authority to require pre-

—Continued on page 61

Spencer Is Set to Operate Unique Type Argon Plant

Spencer Chemical Company, Kansas City, Mo., will operate the first plant of its type ever built in the United States to meet the expanding demands for argon in this country.

American Messer Corporation has designed and furnished the unit which is about to go on stream in Vicksburg, Miss.

The argon plant, rated at 3 million cubic feet per month, will utilize as feed stock an argon-enriched waste gas stream from an existing ammonia plant.

Argon produced by this plant will be sold under an exclusive agreement by Spencer with the Southern Oxygen Company to meet the growing demands for this gas in industry, particularly in connection with electronic and missile construction applications.

GEN'L MILLS VICE-PRESIDENT: Dr. William B. Reynolds, named vice-president and director of research by General Mills, Inc., Minneapolis, Minn.

Trimellitic Anhydride Wins Favor of Amoco

Amoco Chemicals Corporation has taken the first step in its program for full-scale commercialization of trimellitic anhydride. The Chicago company reports that it will start construction immediately on a semi-commercial plant to produce the material in multi-million pound quantities.

Here is what George A. Harrington, general manager of development for the company, has to say about the material:

"Amoco Chemicals first introduced trimellitic anhydride in development quantities less than a year ago. Its rapid progress from development toward commercialization is a tribute to the unique advantages this chemical offers to protective coatings, plastics, and adhesive manufacturers.

"The unusual reactivity offered by the presence of both an anhydride and a free acid group in the chemical structure enables the chemist to make products which

—Continued on page 66

Reichhold Unit on Stream For Making Formaldehyde

Reichhold Chemicals, Inc., White Plains, N.Y., has gone on stream with a $500,000 formaldehyde plant at Kansas City, Mo.

Capacity of the new unit, according to Reichhold, is 30 million pounds a year. This is the firm's seventh domestic formaldehyde installation to be put into production.

Borax Men Saw Cancellations Due In Fuels Program

Two chemical makers got mauled last week when the government suddenly pulled the plug on its high-energy fuel program—but the borax men who supplied basic materials for the multi-million-dollar project weren't surprised.

The suppliers had not thought much of the project's possibilities anyhow, so last week when Olin Mathieson Chemical Corporation and Callery Chemical Company lost their big government contracts for exotic fuels the suppliers could only say that what they had expected appeared to be coming true.

The Kiss of Death

Early in the week the air force cancelled out its $110 million high energy program, automatically giving the kiss of death to a $45 million AF plant at Model City, N. Y., that was constructed and run by Olin Mathieson.

One day later the navy followed suit by cancelling its own $122 million program. This put the quash on the $37 million facility run by Callery Chemical Company—at Muskogee, Okla.—the only other major military plant making high energy fuels.

Unscathed was Stauffer-Aerojet Chemical Company. That outfit's high-energy fuel program to develop low-cost boron fuels was not affected by the government cancellations.

The current Stauffer-Aerojet contract with the air force will be carried on at full rate to provide for operation of the large-scale pilot plant at Sacramento, Calif.

The program is on schedule with the pilot plant now in active start-up. Commencement of successful operation is expected within a few weeks.

Olin spokesmen said the firm wasn't hurt as badly as it might have been. Money used to build and run the Model City facility was government money. All Olin will be out is expected returns for running the unit. Also, of course, the New York firm will have to shift some personnel about.

Callery appears to be staggered a bit more by the development. More deeply invested in the high-energy fuel program than the broadly-diversified Olin, the Pittsburgh, Pa., chemical maker was depending heavily on the air force picking-up its Muskogee contract when it terminated with the navy at the end of the year.

Cancellation of a major high-energy fuel program will have "no appreciable effect" on United States Borax & Chemi-

—Continued on page 67

Ammonia Plant Work Under Way in Arizona

Southwestern Nitrochemical Company has broken ground in Chandler, Ariz., for an ammonia plant scheduled to put out eighty tons per day. The plant will cost $4 million and will be completed in January, according to the company.

Southwestern Nitrochemical is a joint subsidiary of First Mississippi Corporation and Southwestern Agrochemical, a farmer-owned corporation now producing sulfuric acid and ammonium phosphate.

Plastics Unit Stop-Off Objective for Khrushchev

Soviet Premier Nikita S. Khrushchev and the US plastics industry will in all probability get together when the Red leader comes avisiting next month. But just when and where hasn't been decided yet.

According to a spokesman for the Society of Plastics Industry, the group has offered its services to Vice-President Richard Nixon in the way of trying to come up with something that will work into Premier Khrushchev's tight tour schedule.

Mr. Khrushchev voiced a desire to see an American plastics fabricating unit during Vice-President Nixon's recent visit to the Soviet Union. And the SPI figures it won't do the American cause any harm to show the top Red how it's done in the US.

Drug Industry Probe by Kefauver Starts Boiling

The pot is beginning to boil around the Kefauver investigating committee and its plan to probe the pricing practices of the drug industry.

The Pharmaceutical Manufacturers Association let it be known last week that it is starting preparations of industry's story on how it operates to develop, produce and distribute its life-saving products throughout the United States and the rest of the world. It hopes for the opportunity to present the picture to the committee when hearings get under way.

No date, as yet, has been set by committee chairman Estes Kefauver of Tennessee for the public hearing phase of the inquiry, but the general expectation is that it will be announced for sometime in October or November.

Since June the committee staff has been going over data obtained by the drug industry from questionnaires sent out to nearly two dozen firms earlier in the year.

If things go as expected, PMA hopes to present one of the lead-off witnesses in the hearings to make a general statement about the drug industry in the nature of a backdrop for testimony of a more specific character which may be called for by the committee.

The association is currently working with a number of member companies in gathering data that will show how drug products are developed, tested and distributed along with other aspects of the industry's operations that will provide a clear background picture for the committee.

Chemical Men May Get Relief From Interstate Business Taxes

Chemical producers and people in the allied trades may this year get the relief they are seeking from congress on multiple state taxation of interstate corporations. The house judiciary committee unexpectedly reported a bill to the house last week to limit the right of states to tax corporation incomes, and all that now needs to be done is to convince the leadership that the bill is essential so that it can be programmed for passage before adjournment. The action was a reversal of earlier committee intentions to put the question over until next session.

A special subcommittee of the house judiciary committee that had been formed to deal with the problem announced several weeks ago that hearings would not be held on the legislation until October and that a report would not be made to the full committee until next year (OPD 7/27/59).

Stop-Gap Legislation Needed

These plans of the subcommittee still hold good, committee aides said, but in the meantime it was thought best that some stop-gap legislation should be passed to at least hold the states in check until the matter can be dealt with more fully in a general bill.

The bill reported by the judiciary committee is of a temporary nature and applies only to taxable years ending after December 31, 1958, and before January 1, 1961.

The finance committee of the senate, meanwhile, has reported similar legislation which is expected to be acted on shortly (OPD 8/10/59). The bill, S 2524, was drawn up after several days of hearings both by the finance committee and by the senate small business committee which viewed the supreme court decisions in the Stockham Valves & Fitting Company and Northwestern Portland Cement Company cases as broadening the power of the states to tax in such a way as to put a burden on industry, both big and small.

The bill reported to the house, HJ Res 450, differs somewhat from the senate bill. It is viewed by some as giving the states slightly more freedom to tax their proportionate share of interstate corporate incomes than does the senate bill, and un-

—*Continued on page 49*

Ammonium Nitrate Alone Just Innocent Fertilizer

Manufacturing Chemists' Association and National Plant Food Council want to make one thing clear about ammonium nitrate: The fertilizer grade is not an explosive!

The material will not blow up unless mixed with some organic matter such as oil, the associations emphatically point out. A mixture of that type was reportedly aboard a truck that exploded recently in Roseburg, Ore., killing thirteen people and doing extensive damage. Also on board were about two tons of dynamite.

DuPont Starts Push On Polyethylene Film

E. I. duPont de Nemours & Co. is getting set for the big push in polyethylene film for packaging purposes. The Wilmington, Del., company has just revealed plans for what it calls its "first major plant" for production of the material.

The site will be Richmond, Va., and the expected starting date is some time early in 1960. Production equipment is already being installed.

To be operated as a unit of the present Spruance cellophane unit, the new production facilities will be located for the most part in exsiting buildings formerly used for rayon production.

A 12,000-square-foot addition to these buildings will be constructed for production equipment. New facilities will be provided for testing laboratories of

—*Continued on page 55*

Mint Oil Forecast Down This Year for 2nd Time

Production of mint oil from the 1959 crop is forecast at 2,887,000 pounds this year by the Crop Reporting Board of the Department of Agriculture. This represents the second successive year of reduced output by the producing industry.

The board estimated peppermint production at 2,224,000 pounds, 13 percent less than last year but 24 percent above average. Spearmint production is forecast at 663,000 pounds, 34 percent above the 1958 production and 11 percent more than average.

Minerals Policy Law Gets Support of Adminstration

The administration gave its support last week to a national minerals policy law that would place the government on record in favor of helping the domestic mining industry.

The bill makes the Secretary of the Interior responsible for carrying out the policy and requires submission of annual reports on the state of the domestic mining and minerals industry.

Gas Additive Goes Higher

An industry-wide price increase of 1½ cents goes into effect on spot today (August 17) for cresyl diphenyl phosphate, gas additive grade. The new tankcar delivered price in zone 1 of 28 cents per pound will become effective October 1 on contract.

The Week's Price Changes

Linseed Meal, Geranium and Sandalwood Oils Advanced. Mercury, Methacrylic Acid, Soybean Meal Reduced.

Prices Advanced

Geranium, Algerian, 50c. per lb. (p. 53).
Bourbon, $4.50 per lb. (p. 53).
Linseed meal, ext., $2.50-$3 per ton (p. 58).
Expeller, $2 per ton (p. 58).
Sandalwood, $1 per lb. (p. 53).
Tung oil, ¼c. per lb. (p. 58).

Prices Reduced

Castor oil, No. 1, Braz., ¼c. per lb. (p. 58).
Cocoa butter, ½c. per lb. (p. 58).
Coconut fatty acid, 2c. per lb. (p. 58).
Coconut oil, crude, ¼c. per lb. (p. 58).
Copra, $8.50 per ton (p. 58).
Corn oil, foots, 95%, ¼c. per lb. (p. 58).
Corn oil, crude, ⅛c. per lb. (p. 58).
Refd., ⅛c. per lb. (p. 58).
Cottonseed oil, crude, ¼c. per lb. (p. 58).
Refd., ¼c. per lb. (p. 58).
Lard, cash, 2/3c. per lb. (p. 58).
Mercury, $3 per flask (p. 32).
Linalool, 60c. per lb. (p. 53).
Syn., 50c. per lb. (p 53).
Linalyl acetate, 90-92%, 20c. per lb. (p. 53).
96-98%, 50c. per lb. (p. 53).
Syn., 50c. per lb. (p. 53).
Methacrylic acid, glacial, bulk, 5c. per lb. (p. 40).
Molasses, New Orleans, ¼c. per gal. (p. 40).
Oleic acid, ½c. per lb. (p. 58).
Oleo stearine, ½c. per lb. (p. 58).
Peanut oil, crude, ½c. per lb. (p. 58).
Refd., ½c. per lb. (p. 58).
Soybean meal, $1.50 per ton (p. 58).
Soybean oil, foots, ¼c. per lb. (p. 58).
Tallow, edible, ¼c. per lb. (p. 58).
Tallow, fatty acid, ½c. per lb. (p. 58).
Tankage, N.Y., Chicago, 25c. per unit-ton (p. 38).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Aug. 14, 1959	Aug. 7, 1959	Aug. 15, 1958
109.42	109.33	109.30

AEC Cozying Up to Thorium

Thorium is soon going to find a warmer spot in the heart of the Atomic Energy Commission. AEC has just decided to be a little cozier with the material by taking advantage of its latent energy through the use of effectual thermal breeders. Responsibility for the program, to be known as the Thermal Breeder Reactor Program, has been assigned to the commission's Oak Ridge Operations Office. The new program has as its objective the development of a thermal breeder reactor capable of converting thorium to fissionable fuel material at a doubling time of not more than twenty-five years.

Thorium is an element which when bombarded with neutrons is converted to fissionable uranium-233. It is more abundant in the earth than natural uranium. However, the amount of known reserves that can be exploited for commercial use is less than natural uranium.

A thermal breeder reactor is a reactor in which the nuclear chain reaction is sustained by neutrons moderated or slowed down to thermal (heat) energies and in which more fissionable material is produced than is consumed.

In the initial loading of the thorium-uranium cycle, thorium is inserted in a reactor fueled with either uranium-235 or uranium-233, both fissionable materials. The chain reaction is sustained by the uranium while the thorium is con-

—*Continued on page 52*

SINCLAIR LABS MANAGER: Dr. R. R. Chambers, appointed technical manager of Sinclair Research Laboratories, Inc., Harvey, Ill.

American-Marietta Buys Concrete Firm in Iowa

American-Marietta Company, Chicago, has acquired Concrete Materials & Construction Company, Cedar Rapids, Iowa. The purchase includes an associated firm, Concrete Materials Company.

According to American-Marietta, the newly-acquired operation will be consolidated into an independent division under existing management. Earlier this year American-Marietta entered the concrete aggregates field through the acquisition of Superior Stone Company, Raleigh, N. C.

Terephthalic Acid Method Developed by German Firm

Henkel & Co., a German firm, has developed a method for the direct production of terephthalic acid from benzene.

According to a report, the method involves the direct oxidation of benzene to benzene dicarboxylic acids and the subsequent conversion of this mixture wholly into terephthalic acid at high temperatures and pressures in the presence of a metallic catalyst and potassium carbonate.

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Sulfur Tetrafluoride Is

Sulfur tetrafluoride really is. There used to be a lot of good, scientific doubt that the stuff actually was, but there isn't any more.

Proof of its existence was given last week when E. I. duPont de Nemours & Co., after a lot of dogged laboratory digging, decided to put the material on the market in developmental quantities.

Sulfur tetrafluoride is a reactive gas which, unlike other reagents, possesses the ability to replace oxygen with fluorine in many chemical compounds. Dr. Earl L. Metterties, of the Wilmington, Del., company's central research department, started the whole thing when, challenged by the fragmentary references to the gas, he set to work to see whether it could actually be synthesized.

When the first efforts proved successful, Dr. William Channing Smith, also of the central research unit, investigated to find out with what the new compound could be reacted and to determine some practical applications.

A third member of the central research group, Dr. Charles W. Tullock, tackled the problem at this point and explored new kinds of fluorinating reactions and developed a commercially feasible method of production.

DuPont sees the chemistry of sulfur tetrafluoride opening up a whole new range of selectively fluorinated products, particularly in pharmaceutical materials.

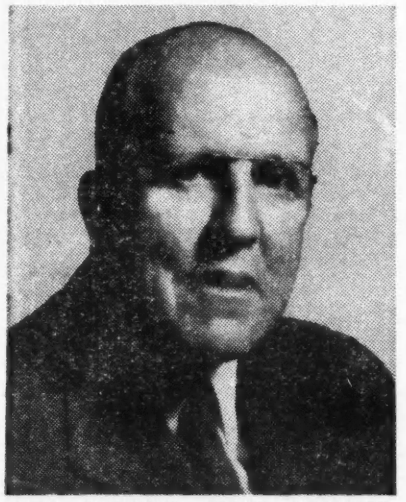
Also, duPont says, the ability of fluorine to cause or to modify biological activity of other chemicals might lead to better insecticides and herbicides.

Other uses of the fluorinating agents might be in production of improved weather-resistant finishes, and oils, films, plastics, and elastomers with high thermal stability and resistance to oxidation.

While much remains to be learned about the chemistry of the compound, duPont chemists say their studies show sulfur tetrafluoride can be reacted effectively with a variety of carboxylic acids and carbonyl compounds.

Olin's Secret Is Finally Bared: Glycerine Production in the Works

Olin Mathieson Chemical Corporation, which has been secretly coveting a hunk of the burgeoning glycerine market for some time now, has finally made a clean breast of the whole business. An announcement by the New York firm last week of a $30 million expansion program that includes a glycerine producing unit at Brandenburg, Ky., confirms rumors that have been rife in the market for the past few months. And while Olin is at it, it's going to get its feet wet in a few other new areas as well. Other firsts to be produced at the projected Brandenburg unit: epichlorohydrin, propylene oxide, propylene glycol and polypropylene glycols.



ARMY CHEMICAL PLANT MANAGER: R. H. F. Dade, appointed general manager of the chemical facility which Food Machinery & Chemical Corporation will design, construct and operate for the Army Chemical Corps at Newport, Ind.

Additional key points to the firm's big expansion bid include:

Other Phases of Expansion

- Beefing-up of existing facilities at Brandenburg to double production of "Poly-Solv" glycol ethers, "Poly-Tergent" surfactants and ethylene dichloride.
- Construction of a new facility to produce sulfamic acid at Joliet, Ill.
- Improvement of chlorine production facilities at Niagara Falls, N. Y.

According to Olin president Stanley de J. Osborne, the big program will be financed with cash from the company's normal operations.

The expansion, Mr. Osborne points out, is part of a five-year program to "improve for future growth within our six principal areas of activity—chemicals, metals,

—*Continued on page 42*

Medicinals Output Up; Dollar Sales Are Down

Medicinals output picked up last year as did quantity sales but dollar returns took a laggard's path. This is the way the Tariff Commission sees it in a preliminary report issued last week. Total output of medicinals (in bulk), the report says, was 101.4 million pounds, or 2.6 percent more than the output of 98.8 million pounds reported for 1957.

Sales in 1958 totaled 81.4 million

—*Continued on page 42*

Chemical Stockholders Get Bigger Returns This Year

Stockholders in chemical companies received larger cash dividends during July than during the same month a year ago and for the first seven months of this year are ahead of the total for the corresponding period in 1958, according to the Department of Commerce.

Publicly reported cash dividends paid by chemical companies in July amounted to $29.3 million as against $27.1 million during July of last year. For the first seven months of this year cash dividends have totaled $487.9 million as compared with $470.7 million a year ago.

Color Users Feel in the Pink For They Are Gaining Ground To Get Action on the Hill Bill

Industrial consumers of colors are feeling in the pink these days, for they are gaining ground in their efforts to get action on the Hill general control bill (S 2197) before adjournment. There were some reports going around in congressional and industrial circles last week to the effect that the senate labor and public welfare committee may act within a few days to report the bill without hearings and send it to the senate floor for passage. Whether the legislation can clear the senate and move on to the house before the end of the session is another matter, however.

The rosy optimism surrounding chances for action on the legislation is based on the fact that thus far there has been no opposition expressed to the senate committee against the bill from any quarter.

Hears Nothing But Support

Rather, the committee has heard nothing but support and, as explained by committee aides, where industry and the government are in agreement on a piece of legislation—as in this case—it is not unusual for the committee to report the bill without hearings.

S 2197 is the administration's bill for controlling the use of colors in foods, drugs and cosmetics, with one major difference. Sen. Lister Hill of Alabama, committee chairman, when he introduced the bill, eliminated the so-called Delaney amendment (Rep. John Delaney of New York) on carcinogens on the grounds that he did not believe that any one disease should be singled out for which tests are to be required.

The Delaney amendment was included in the bill when it was sent to the capitol by the Department of Health, Education and Welfare, and is in the Harris bill in the house (HR 7624), but the Food and Drug Administration—and HEW—would be just as pleased, it is now said, if the Hill bill was passed without it.

No date has been set by the senate labor committee for a meeting on the color bill but it is possible that Sen. Hill might call a meeting of the group anytime there is a break in its schedule of work on other measures to take up this and other "noncontroversial" bills.

Industry users of colors are anxious for passage of the senate bill before adjournment so that during the recess between sessions consideration can be given to modifying the Delaney provisions in such a way as to make them more workable.

As matters now stand under the food additives law with its Delaney provisions

—*Continued on page 54*

SPENCER INT'L MANAGER: Albertus Slingerland, named general manager of Spencer Chemical Company International, Inc., a wholly-owned subsidiary of Spencer Chemical Company, New York.

Borax Concern Planning To Modernize in France

Borax (Holdings), Ltd., reveals that following a study of European conditions, its French subsidiary, Borax Francais S.A., plans to embark on a further capital expenditure programme of Fcs. 500 million in order to modernize and supplement existing services at their factory, and also to provide for further expansion in boric acid production.

This is additional to the extension in progress which was announced earlier, and which involves capacity equal to double the existing production. The expansion is due to expectations of an increased demand for boric acid by French industry, and the prospect of exports of boric acid to neighboring common market countries.

Hodag Expands Facilities

Hodag Chemical Corporation, Chicago has completed expansion of its production, laboratory and office facilities. The construction has quadrupled Hodag's former plant space. Laboratory space has been tripled and office space doubled.

Foote Will Expand Manganese Facilities

Foote Mineral Company, Philadelphia, is going to expand its electrolytic manganese facilities by the first of next year and has awarded contracts for new construction at the larger of its two Knoxville, Tenn., plants.

The expansion, which will increase the plant's capacity by 30 percent, is the first step of a major program necessitated, Foote says, by the growing demand for electrolytic manganese in stainless and mild steels.

This is the second time in two years that the capacity of the Loraine street plant has been increased.

The new construction will incorporate process improvements which have resulted from an intensive research study begun shortly after Foote and Electromanganese merged in 1956.

The increase in production levels is expected to come both from new deposition cell capacity and from higher efficiencies throughout the plant.

The firm of Foster & Creighton has been awarded the contract for construction work.

Butadiene Unit Going Up

Naphtachimie S.A., of France, is building a butadiene extraction plant that will use cracked gases as a raw material, just outside of Marseilles. Initial capacity of the unit, according to the firm, will be 6,000 to 7,000 metric tons per year. Se Francaise des Petroles BP has a substantial interest in the firm.

Stauffer Claims a First In New Electric Setup

Stauffer Chemical Company is taking credit for being the first chemical concern in the Niagara Falls, N. Y., area to convert all its facilities from 25-cycle to 60-cycle power.

The changeover is part of a program affecting the entire area. The New York-headquarted company said it used the transition to install the latest type equipment, including silicon diode rectifiers, in its Niagara Falls chlorine production facilities.

Poland Digs a Lot of Sulfur; a Lot Is Left to Dig

Poland has dug its way through a lot of sulfur since discovery of unusually rich deposits of the stuff in that country four years ago. And the sulfur men there think there is still a lot of digging to be done, for they are claiming to have—under the ground, of course—the second largest deposit of sulfur in the world.

In a recent issue, *Chemistry and Industry*, the official publication of the Society of Chemical Industry, has taken the Polish sulfur business apart to show how it has ticked these past four years.

As one of the accomplishments, detailed blueprints of the deposits in the Tarnobrzeg sulfur region (Rzeszow voivodship) were worked out on the basis of drillings and hydrogeological research.

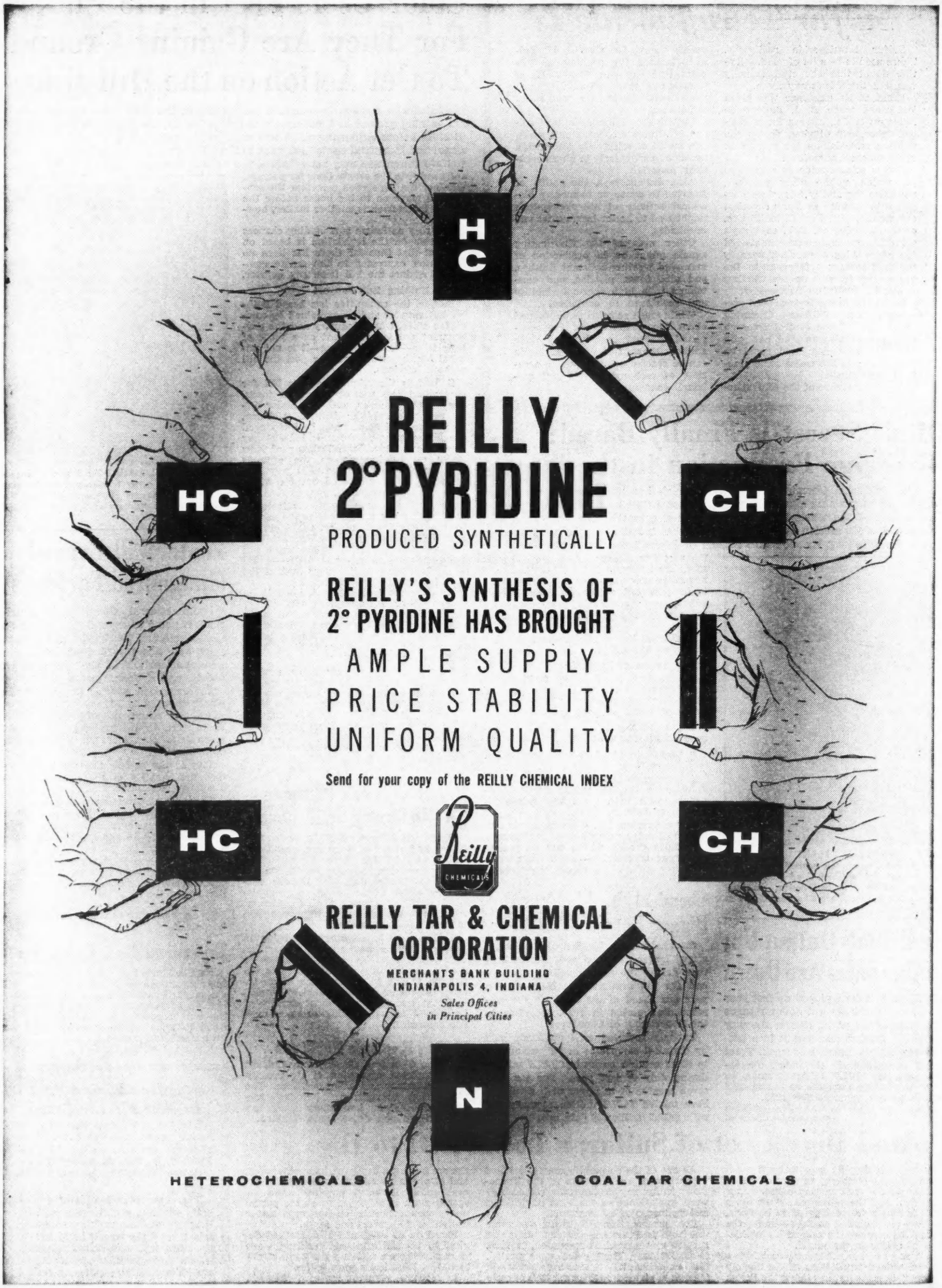
For another thing, a sulfur ore mine was built in Piaseczno and exploitation of the ore was started. It amounted, in 1958, to 40,000 tons. During the same period, the experimental processing works in Ogorzelec yielded up the first tons of pure product.

A technological process for enriching the ore has been designed, as another step, and at present a concentrate with 85 percent sulfur is being obtained. And research work is going on to obtain particularly rich concentrates having a sulfur content of 90 percent and more.

Based on an original Polish method devised by the Sulfuric Acid Institute, work is continuing on refining the concentrate to obtain technically pure sulfur.

In Machow, construction of a chemical processing combine is progressing rapidly

—*Continued on page 48*



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CENTRAL SOYA MANAGER: Donald E. Sincroft, made manager of bulk lecithin and export sales in its chemurgy division by Central Soya Company, Fort Wayne, Ind.

Chemicals on Rise In Foreign Trading

Heavier exports, together with larger imports, pushed foreign trade in chemicals and allied products during the first six months of this year $65.6 million ahead of the same period last year, say preliminary estimates of the Bureau of Census.

Total exports in the first half of this year reached $726.3 million as compared with $688.3 million last year, while imports were valued at $171.2 million as against $143.6 million last year.

At no time during the first six months of the year did either exports or imports fall below those of the same month last year.

June exports, however, fell below those of May of this year, while on the import side of the ledger June imports were up slightly from those of May.

The bureau estimates exports of chemicals during June at $121.3 million as compared with the high May total of $130.3 million. Imports in June amounted to $29.7 million as compared with $28.9 million in May.

June's foreign trade balance in chemicals and related products amounted to $151 million as against only $134.1 million for June, 1958.

While the trend of exports of chemicals was up from that of last year for the

—*Continued on page 61*

Smith-Douglass Merger With Smith Is Approved

Stockholders of Smith-Douglass Company, Norfolk, Va., have voted to approve the proposed merger with Smith Agricultural Chemical Company.

Smith-Douglass has ten plants throughout the eastern half of the United States, while Smith Agricultural Chemical Company has four plants in Michigan, Indiana and Ohio, with headquarters in Columbus. Smith-Douglass and Smith Agricultural Chemical Company are major producers of fertilizers and chemicals for farm and non-farm use.

Essential Oil Companies Hope To Smoke Out New Business If Cigarette Flavors Catch On

If the flavored cigarette is not just a pipe dream, essential oil and aromatic chemical companies may soon be able to smoke out a lot of new business for themselves. Such is the reaction of New York dealers to the increasing number of reports indicating that very shortly people may order their cigarettes the way they order ice-cream cones—by flavor. Apple blossom, cinnamon, pineapple, root beer and new-mown hay are but a few of the proposed flavors.

Just how far the tobacco men will go in their efforts to produce a cigarette that has taste—even through a filter—is anybody's guess. Only the tobacco companies know and they surely aren't telling.

Tobacco Men Tight-Lipped

The tobacco industry long has had a reputation for secrecy, and company representatives queried by OPD last week did nothing to shake that widely-held belief. None would expound upon the flavor angle and some wouldn't even admit that their cigarettes contained anything but tobacco.

This, say the essential oils and aromatic dealers, is not true. All nationally-known American cigarettes contain flavor—not flavoring as one might think of ice cream being flavored, but flavoring, nonetheless.

The principal ingredient found in cigarettes, they report, is coumarin. Nutmeg, anise and coriander are others.

The best-known flavor, of course, is menthol. Besides the various brands that have been on the market for the past few years, several new ones are now in the debut stage.

It is commonly believed that menthol cigarettes today account for about one-tenth of the market, and that this share may well climb to around 13 percent by the end of the year.

These figures are disputed however, by a large mentho! distributor. He concedes that the number of menthol brands is growing, but he contends that the actual number of menthol cigarettes is about the same as it has been in recent years.

The new flashy packages and the flowery advertising campaigns, he maintains, have only taken the menthol-smoking customers away from the old brands.

—*Continued on page 54*

Copan Tin Alloy Offering Is Being Readied by GSA

An offering of 537 long tons of Copan tin alloy is going to be made to commercial users within a few weeks by the General Services Administration.

The material was produced from tin concentrates high in antimony and copper and is a specific type used in the manufacture of genuine babbit.

The alloy was produced at the Texas City tin smelter when that facility was owned by the government and has since been held in inventory.

GSA proposes to set a price for the alloy that will take due consideration of the tin and antimony content in the light of present market conditions and to offer it in minimum quantities of five tons on a "first come, first served," basis, f.o.b. storage site.

DEWEY & ALMY DEP'T HEAD: Robert A. Clabault, appointed manager of its newly-created sales development department for container sealing compounds by Dewey & Almy Chemical Division of W. R. Grace & Co., Cambridge, Mass.

DuPont Making Mark In Alcoholics' Reform

E. I. duPont de Nemours & Co. may never put Alcoholics Anonymous out of business but it is certainly making sure the rehabilitation group doesn't completely corner the field. The Wilmington, Del., chemical maker, front-runner in so many other fields, has been making a bid to leave its mark in the alcoholics rehabilitation field. And according to a book by a member of the firm's medical staff, duPont's been doing all right.

Dr. C. A. D'Alonzo, assistant director of the medical division, has just published a book, "The Drinking Problem and Its Control," as a guide to control of alco-

—*Continued on page 37*

Detinning Unit Set Up

A new detinning division, consolidating responsibilities for procurement, operations and sales, has been set up by Metal & Thermit Corporation, New York. This is a step in the company's program of gradual reorganization into product divisions, the firm says. General manager of the new division is J. K. Parks, who will report directly to the president.

Gulf Oil Reveals Its Own Manifesto Of Political Aims

Gulf Oil Company, which sounded a clarion call to political action for industry just before last year's national elections, have now issued a political manifesto telling what its aims are.

And one of the key points in the Pittsburgh, Pa., firm's program is that Gulf will go it alone, despite intimations in its initial pronouncement that industry should close ranks to preserve its political rights.

Why Gulf Goes It Alone

In an introduction to the manifesto, Gulf senior vice-president Archie D. Grey, voice of the company in its earlier statement, said that Gulf's decision to go ahead alone was prompted by recognition that "in our political system any political program can be effective only to the degree that it reaches down to the roots of all our politics—to the people who vote and who urge others to do likewise."

In other words, Gulf is basing its program on old-fashioned Jeffersonian grass roots democracy.

In Mr. Grey's 1958 statement, he pointed out that "whether we want to be there or not, Gulf and every other American corporation is . . . up to its ears in politics, and we must either start swimming or drown. Gulf's management would be derelict in its duty to its shareholders and employees alike if it tried to ignore this fact and did nothing . . ."

Stung into action as it feels it has been by government movement on the corporate front, Gulf intends to attack the problem on a number of different levels, all aimed at redressing an untenable situation.

On the one hand, the firm is going to tell its story to its shareholders, employees, dealers and friends, and encourage them to get into the political arena and fight for what is theirs.

Says Mr. Grey in his introduction to the program: "When adequately informed, people generally can be relied upon to vote and work for the best interest of their community and country."

And in the opening lines of the company's credo it is pointed out that the pro-

—*Continued on page 66*

Heavy Water Plant Given To Chemical Corps by AEC

The Atomic Energy Commission has released its Dana heavy water plant, Newport, Ind., to the Department of the Army for use by the chemical corps.

The plant has been maintained in a standby condition since June, 1957, following the commission's determination that there was an adequate heavy water stockpile and requirements could be supplied by the commission's Savannah River heavy water plant.

The Dana Plant is located near Newport, Ind., on land owned by the Department of Defense. Construction of the plant was started in 1950 and it went into operation in May, 1952. Cost of the plant was approximately $100 million.

Association Meetings

American Association of Textile Chemists & Colorists, annual meeting, Shoreham Hilton hotel, Washington, D. C., October 7-9.

American Chemical Society, national meeting, Atlantic City, N. J., September 13-18.

American Coke & Coal Chemicals Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., October 19-20.

American Institute of Chemical Engineers, St. Paul, Minn., September 27-30.

American Oil Chemists Society, fall meeting, Statler-Hilton hotel, Los Angeles, September 28-30.

American Pesticide Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 16-17.

American Pharmaceutical Association, annual meeting, Netherlands-Hilton hotel, Cincinnati, Ohio, August 16-23.

Armed Forces Chemical Association, annual meeting, Statler-Hilton hotel, Washington, D. C., September 10-11.

Association of American Feed Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 14-15.

Association of Consulting Chemists & Chemical Engineers, annual symposium, Shelburne hotel, New York, October 27.

Association of Official Agricultural Chemists, annual meeting, Shoreham hotel, Washington, D. C., October 12-14.

Canadian Agricultural Chemicals Association, annual meeting and conference, Chateau Frontenac, Quebec City, Que., Canada, September 20-23.

Chemical Industries Exposition, New York Coliseum, New York, November 30-December 4.

Chemical Market Research Association, resort meeting, Williamsburg Lodge and Inn, Williamsburgh, Va., September 21-22.

Chemical Specialties Manufacturers Association, annual meeting, Mayflower hotel, Washington, D. C., December 7-9.

Drug, Chemical & Allied Trades section of the New York Board of Trade, annual meeting, Sagamore hotel, Bolton Landing, Lake George, N. Y., September 17-20.

Electrochemical Society, Deshler-Hilton hotel, Columbus, Ohio, October 18-22.

Federal Wholesale Druggists Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., August 30-September 2.

Federation of Paint & Varnish Production Clubs, annual convention, Convention Hall, Atlantic City, N. J., October 22-24.

Gordon Research Conferences: "Food and Nutrition," Colby Junior College, New London, N. H.; "Analytical Chemistry," New Hampton School, New Hampton, N. H.; "Chemistry and Physics of Metals," Kimball Union Academy, Meriden, N. H., August 17-21.

National Agricultural Chemicals Association, annual meeting, Sheraton Lick hotel, French Lick, Ind., October 21-23.

National Association of Retail Druggists, annual convention, Kiel Auditorium, St. Louis, Mo., September 20-24.

National Paint, Varnish & Lacquer Association, annual convention, Chalfonte-Haddon Hall, Atlantic City, N. J., October 19-21.

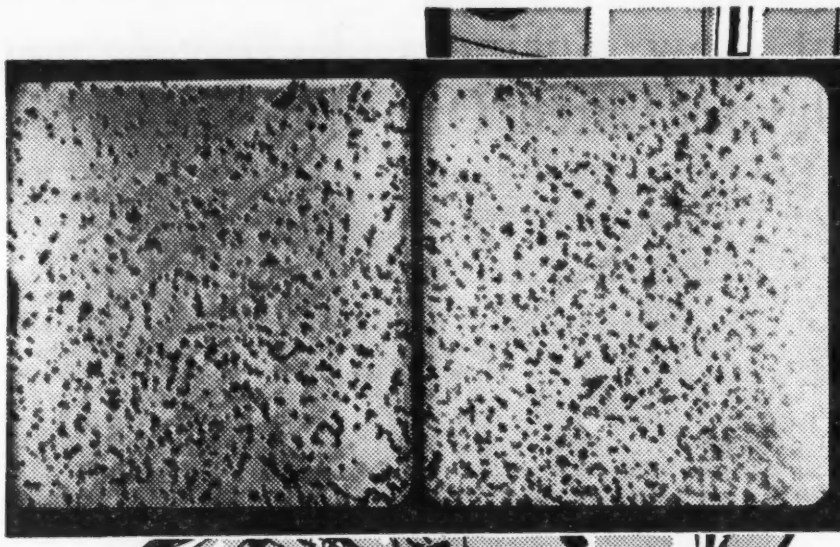
National Pest Control Association, annual convention, Buena Vista hotel and motel, Biloxi, Miss., October 19-22.

Paint Industries' Show, sponsored by Federation of Paint and Varnish Production Clubs, Convention Hall, Atlantic City, N. J., October 20-24.

Parenteral Association, annual meeting, Statler hotel, New York, October 14-16.

Society of the Plastics Industry, midwest section conference, French Lick Sheraton hotel, French Lick, Ind., September 10-11; New England section conference, Wentworth-by-the-Sea, Portsmouth, N. H., October 1-2.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, September 15.



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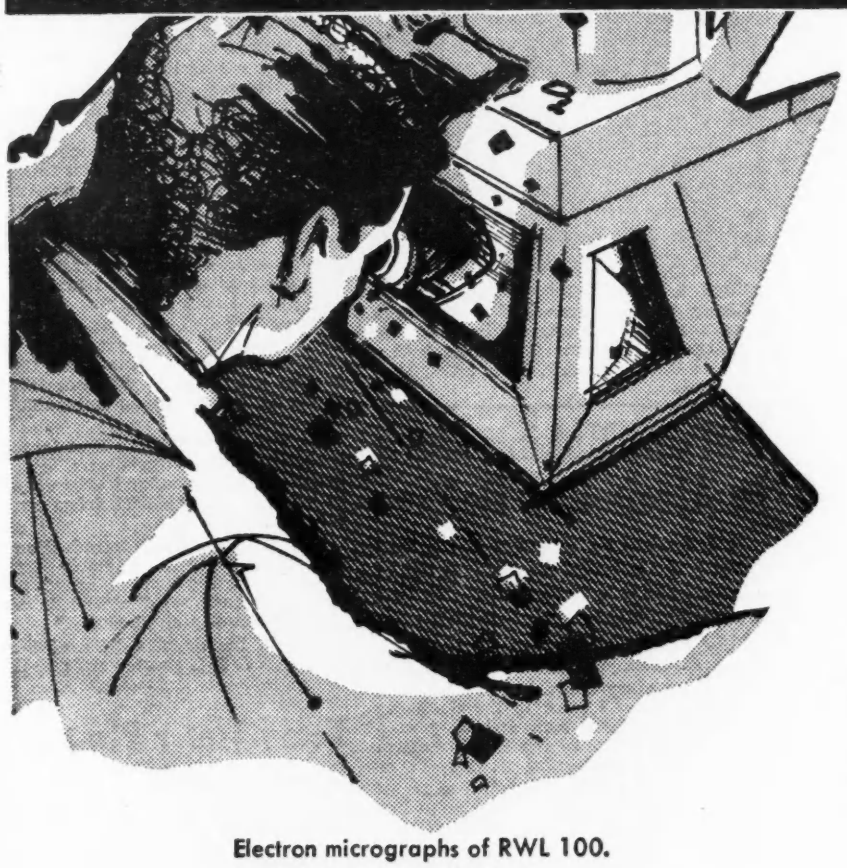

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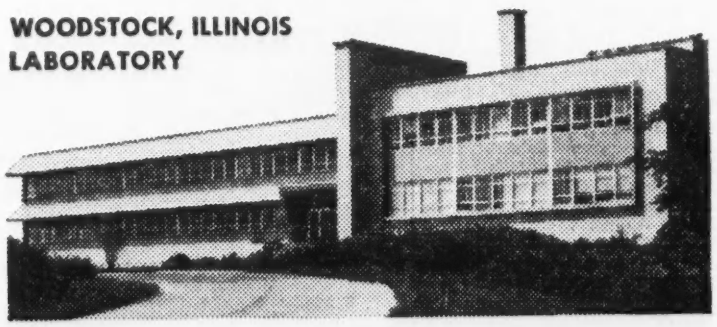

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International Visiting

Great expectations and grave doubts characterize, with varied relativity, the expressed attitudes of the peoples of the earth's several worlds with respect of the much publicized exchange of visits of some type between the President of the United States and the Premier of the Soviet Union. Because the latter is a dictator with firmly fixed objectives on a worldwide scale, although with a versatile personality adjustable to all the aspects of any given situation, the optimism of many of the expectations on his visit to this country does not have a firm—if any—foundation.

That is particularly pertinent with respect of what is so widely proclaimed to be the nature and extent of what the Soviet visitor will learn about the United States. Any expectations in that direction must take due cognizance of the clearly and repeatedly demonstrated fact that the Soviet chief will not learn anything that he does not want to know. And it is equally clear, on the basis of experience with the visits to this country by his two major associates, that none of them wants to learn anything that cannot be applied to the promotion of the cause of communism. For that reason, it must be believed that, were the top-notch Soviet given the opportunity, proposed by the Secretary of Defense, to inspect this nation's most important military establishments, the effect on him would be, not the deterrent forecast by the secretary, but an increased incentive to go home and push harder for more advantages over the United States.

The best part of the big visiting project is the visiting that President Eisenhower has planned to do with the heads of the European members of the free western world. Although there has been a serious endeavor to make it appear that the intervisiting by Mr. E. and Mr. K. is widely regarded to be potentially contributive to world peace, a widely held feeling among governments and peoples in western Europe is that the underlying objective could be to reduce the Big Four to the Giant Two. The President's European visit program has been very commendably improved by his decision to include West Germany and Italy in his calls. There is reason to believe that he will consequently be able to counteract the "excessive nationalism" which a former US ambassador to Britain, a man of notable service to this country and the world in many commercial and social, as well as political, activities, recently told the American Chamber of Commerce in London "touches on the strength and vitality and vigor of the Western alliance."

Chemical Foreign Relations

Various members of the US chemical industry are cultivating pleasant and profitable relations in countries throughout the world by way of intensified and expanded productive and distributive activities. Scientifically or professionally, as well as industrially, chemistry is a basically potential factor in the development of the social and commercial economic aspects of foreign relations. It should be applied as fully as possible, under duly considerative regard for the increasing urging by far-seeing, clear-thinking observers of world needs and affairs that science should devote itself more and more to the development of mankind and less and less to the destruction thereof.

Almost ten years ago, the Department of State published a report on "Science and Foreign Relations," prepared by a special scientific consultant to the secretary. It was a document of 170 pages, and was directed fundamentally to two questions: First, How can the potentialities of scientific progress be integrated into the formulation of foreign policy and the administration of foreign relations so that the maximum advantage of scientific progress and development can be acquired by all peoples? Second, how can foreign relations be conducted in such a manner as to create the atmosphere that is essential to effective progress of science and technology?

The report, declaring that "United States foreign relations with respect of science and technology must take on a more positive and active character than has obtained hitherto," made a number of recommendations toward that objective, concluding as follows: "The Department of State should bear in mind that the government agencies represent only a fraction of the total United States scientific interest and competence; and that accordingly the achievement of a well-balanced international relations program which reflects overall United States scientific potentialities demands a more effective utilization by the department of the extra-governmental scientific competence of the nation. It is imperative that in formulation of program and policies, and in the administration of foreign relations, reference be made to the whole area of United States science that bears on the issue at hand."

The development of the people-to-people foreign relations policy over the intervening decade emphasizes the pertinent potentialities of that conclusion. A special opportunity for chemistry in that area is presented in the coming twentieth conference of the International Union of Pure and Applied Chemistry in Munich, West Germany, August 23 to 29 and the seventeenth International Congress of Pure and Applied Chemistry to be in session there in the following week.

It is seriously to be hoped that chemistry had taken due advantage of the opportunity for especially timely and necessary service in that area of foreign relations presented by the fact that the twenty-first International Congress of Physiological Sciences in Buenos Aires during the week of August 9 was the first held in Latin America.

Chemicals for Defense

Nine days ago, the space committee of the lower house of congress recommended that this country spend three times as much as it has been spending for research in chemical, biological and radiological warfare as the only potential means of meeting the efforts of the communist nations. About a week earlier, the space-age technologists of the federal government made a strong appeal to the chemical industry to provide them with a new, more powerful high-energy propellent for missiles, satelites and spaceships. Last week the air force and navy cancelled contractural agreements for what are popularly designated as chemical fuels—all fuels actually are, as are all other materials, chemicals—for speedy, powerful jet planes.

Just what is expected of the chemical industry as a cooperative partner of Department of Defense? The answer to that question, as are those to many others, is buried under the confusion, internal competition and indecision allegedly and rather apparently characteristic of that agency. The air force fuels decision alone, it has publicly been reported, will do away with the operative need for a special plant that is said to have cost $45,000,000, which is more than is being spent annually in CBR research.

In recommending the tripling of that spending, the house committee released certain censored testimony it had got from the chief of the army chemical corps, who had said that the only way to remedy the vulnerability of this country to Soviet CBR warfare was to give it retaliatory power in that field to serve as a deterrent to attack. He said—and the committee agreed—that new developments in chemical warfare, such as nerve gases and psycho-chemicals, "could provide a swift and cheap method of conquest." The committee made it clear that the defense service could and would be greatly and necessarily assisted if proper use were made of the country's industrial resources. Toward that end, the chemical industry is ready and willing. Whose move is it? What will it be?

25 YEARS AGO
IN
Oil, Paint and Drug Reporter

(ISSUE OF AUGUST 20, 1934)

The lead editorial under the heading, "Methanol Is Not Fearsome," notes that "Although no direct reason has been given by the Secretary of the Treasury for his refusal to authorize the use of methanol as a denaturant in alcohol for use as an antifreeze and in industrial processes, it appears that the official's attitude is wholly attributable to a feeling on his part that the possibility of poisoning by the drinking of denatured alcohol must be avoided at all costs. The secretary seems to have been strongly impressed by the clamor a few years ago, against 'governmental murder' resulting from the imbibing of so-called 'poison liquor.' This impression still persists, and as a consequence methanol 'goes against the grain' of the secretary's mind."

50 YEARS AGO

(ISSUE OF AUGUST 16, 1909)

When the British steamer Nanetta cleared from Savannah on the 7th instant for Liverpool and Bristol she carried in her cargo 6,900 casks of spirits of turpentine, which is declared to be the largest single steamer shipment of turpentine on record.

75 YEARS AGO

(ISSUE OF AUGUST 20, 1884)

"I have not experienced such a dull season as the present for the past twelve years," said a well-known representative of the New York drug trade last week.

Washington Talks It Over

American Chemical Industry Executives Are Finding Themselves Up to Their Ears in Literature Of a Scientific Nature, Thanks Primarily to the Efforts of Two Organizations.

By Ralph L. Cherry
Washington Editor

The American chemical industry today is being treated to an ever-increasing flow of technical and scientific literature, the like of which has never before been seen. And the industry's compliments for this development go primarily to two organizations: Office of Technical Services in the Department of Commerce and the European Economic Cooperation Organization (OEEC).

That which touched off this flood of valuable data for the chemical producers occurred about a year ago when OTS took on the task of serving as a clearing house for translations of hundreds of foreign reports and abstracts of scientific literature, with particular attention to Russia.

In its first year with the program, OTS reported 4,055 complete translations and 35,000 abstracts, most of Russian origin, and heavily weighted on the chemical side. Some 700 titles are being added to the collection each month.

Before this clearing house arrangement was set up, there was no agency through which the many hundreds of translations done by the government agencies for their own use could be released to the public. When the program finally came into being it became an immediate success. During the year, OTS has sold some 80,000 documents at a cost to it of around $40,000.

Russia is being given special attention by OTS. Over 100 technical periodicals issued in Russia are collected for examination by the agency. Of this number, nineteen have to do with the chemical industry in some aspect or another, and are published by OTS in abstract form. Others relate to physics and biology. Included are series from the *Referativnyy Zhurnal*, the Soviet's central abstract journal. Subscriptions to these abstracts are rising rapidly.

A good deal of the technical information of Western Europe which does not find its way to OTS is available in *European Technical Digest*, a monthly compilation of the European Productive Agency. This is a sort of reverse flow of the many years of American help and technical know-how given to Europe in the post-war period.

These digests cover such sectors of industry as chemicals, glass, leather, textiles and timber, while dealing also with all kinds of engineering and equipment, metallurgy and agricultural machinery, with stress laid on such important matters as corrosion, materials handling, packaging, safety and management.

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, August 14 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns. lb. 2.45 - 3.00
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works. lb. .12 - —
dms., l.c.l., works. lb. .13½- —
tanks, works. lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP, bbls., 225-lb. dms. any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, cuml. or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. 100 lbs. 8.25 - —
70%, bbls. 100 lbs. 9.95 - —
80%, bbls. 100 lbs. 10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd 100 lbs. 22.00 -23.00
tech., dms., c.l., dlvd. 100 lbs. 13.75 - —
dms., l.c.l., dlvd. 100 lbs. 14.25 - —
tanks, dlvd. 100 lbs. 10.00 - —
USP, cbys., dlvd 100 lbs. 31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .18 - —
tanks, dlvd. E. lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l., dlvd. lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd. lb. 1.36 - —
Acetoacet-o-toluidide fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l., dlvd. lb. .83 - —
Acetone, CP, dms., c.l., dlvd. lb. .11 - —
dms., l.c.l., dlvd. lb. .12½- —
tanks, dlvd. lb. .08½- —
Acetonitrile, dms., c.l., works lb. .43 - —
dms., l.c.l., works lb. .45¾- —
tanks, works lb. .43 - —
Acetophenetidin, USP, 200-lb. dm., 1,000 lbs., frt. alld lb. 1.22 - —
100-lb. dm., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms. lb. .42 - 1.30
Tech., dms., c.l., works lb. .37 - —
dms., l.c.l., works lb. .37¾- —
tanks, works lb. .35 - —
N-Acetyl-p-aminophenol, 1,000-lb. lots, frt. adjusted lb. 1.45 - —
smaller lots, dms., same basis lb. 1.55 - 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse. lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63½- —
USP, standard, fine, cryst. gran., (20-40 mesh) powd., (80 mesh), 250-lb. bbls., c.l., t.l., same basis lb. .55¼- —
Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

Acids

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic Acid.

Aconite root, bls. lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .51 - —
dms., l.c.l., works lb. .51¾- —
tanks, works lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis lb. .60 - —
Acrylic acid, glacial, dms. l.t.l., dlvd. lb. .65 - —

Abies Siberica Oil—Ammonium Bicarbonate

Acrylonitrile, dms., c.l., t.l., frt. equald lb. .30 - —
dms., l.c.l., l.t.l., frt. equald lb. .31 - —
tanks, frt. equald lb. .27 - —
Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. lb. .32¼- —
bgs., l.c.l., dlvd. lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.10 - —
powd., 30 mesh., fib., dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs. or more, f.o.b., works lb. 5.25 - —
dms., 1-99 lbs., same basis lb. 10.00 - —
Aldol, 95%, dms., l.c.l. lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .99 - —
fib. dms., l.c.l., dlvd lb. 1.04 - —

Alcohols

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs. lb. 1.75 - 1.85
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb. 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls., same basis. lb. 1.35 - —
Alkali blue prices 1c. higher W. of Rockies.
Allethrin, 90%, dms., frt. alld lb. 28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms. frt. alld. lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. lb. .32½- —
dms., l.c.l., dlvd lb. .34 - —
tanks, dlvd. lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys., 55 to 990 lbs. works. lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd. lb. .17½- —
dms., l.c.l., dlvd lb. .19 - —
tanks, dlvd. lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde).

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
		e.p.	end point	Pac.	Pacific
a.p.a.	available phosphoric acid	equald.	equalized	pf.	proof
		exp.	expressed	phos.	phosphate
approx.	approximately	Ext.	external	photo.	photographic
artif.	artificial	F.	fahrenheit	pkgs.	packages
ASTM	American Society for Testing Materials	ferment.	fermentation	powd.	powdered
		f.f.a.	free fatty acid	precip.	precipitated
		f.f.c.	free from chlorine	prod.	producer
Atl.	Atlantic	fib.	fiber	pt.	point
Be.	Baume	f.o.b.	free on board	pulv.	pulverized
bbls.	barrels	f.p.a.	free of prussic acid	purif.	purified
bgs.	bags	frt.	freight	redist.	redistilled
bls.	bales	gal.	gallon	refd.	refined
bots.	bottles	gran.	granular	refy.	refinery
b.p.	boiling point	grd.	ground	reg.	regular
b.p.l.	bone phosphate of lime	I &a.	iron and aluminum	resub.	resublimed
		i.b.p.	initial boiling point	ret.	returnable
b.r.	boiling range	imp.	imported	SD	specially denatured
bxs.	boxes	incl.	included	s.d.	single distilled
C.	centigrade	indust.	industrial	S E.	southeast
cbys.	carboys	kgs.	kegs	sec.	secondary
CD	completely denatured	l-	laevo	secs.	seconds
		lacq.	lacquer	s.g.	specific gravity
c.i.f.	cost, insurance, freight	lb.	pound	shipt.	shipment
		l.c.l.	less than carlots	soln.	solution
cks.	casks	l.t.l.	less truckload	s.u.	standard unit
c.l.	carlots	liq.	liquid	syn.	synthetic
cns.	cans	mfrs.	manufacturers	tanks.	railroad tankcars
coml.	commercial	m-	meta	tech.	technical
conc.	concentrated	m.a.p.	mixed aniline point	tert-	tertiary
CP	chemically pure			t.l.	truck loads
cps.	centipoises	min.	minimum	t.w.	tank wagons
cryst.	crystalline	m.p.	melting point	USP	U. S. Pharmacopoeia
cs.	cases	N-	nitrogen		
ctns.	cartons	n-	normal	vis.	viscosity
cyls.	cylinders	nat.	natural	VM&P	varnish makers & painters
d-	dextro	neut.	neutral		
dbl.	double	NF	National Formulary	W.	west
denat.	denatured	NNR	New and Nonofficial Remedies	whse.	warehouse
dest-dist.	destructively—distilled			w w.	water-white
dl-	dextrolaevo				
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 - 3.45
NF, bots. lb. 3.00 - 3.30
sweet, USP, cns., dms. lb. .75 - 1.30
Aloe, Cape, cs. lb. .35 - .40
powd., cs. lb. .60 - .65
Curacao, kgs. lb. .60 - .70
powd., kgs. lb. .80 - —
Aloin, USP, bbls., dms., kgs. lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene)
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works 100 lbs. 5.05 - —
powd., dms., works 100 lbs. 5.20 - —
USP, burnt, dms. lb. .20 - .21
hydrous, dms. lb. .07¾- .08
Alum, potassium, gran., bgs., works. 100 lbs. 4.55 - —
lump, dms., works 100 lbs. 5.30 - —
powd., dms., works 100 lbs. 5.45 - —
USP, burnt., dms. lb. .20 - .21
hydrous, dms. lb. .07¾- .08
Alum, potash-chrome, dms. lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .05 - —
bgs., l.c.l., works lb. .05¼- .08
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works lb. .16½- —
cryst., dms., c.l. works 100 lbs. 21.00 - —
dms., l.c.l., works 100 lbs. 21.50 - —
soln., 32° cybs., c.l., works lb. .0495- —
cbys., l.c.l., works lb. .0570- .1095
tanks, works 100 lbs. 3.95 - —
NF, gran., dms., works lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼- —
bgs., l.c.l., works lb. .18¼- .20¼
Aluminum fluoride in fib. dms. 0.35c. per lb. higher
Aluminum formate, basic soln., containers extra c.l., works. 100 lbs. 11.00 - —
containers extra, l.c.l. works. 100 lbs. 11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .03½- —
bgs., 20,000-40,000 lb. lots, same basis lb. .03¾- —
bgs., 2,000-20,000 lb. lots, same basis lb. .04¾- —
bulk, c.l., same basis lb. .03¼- —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
9-9½% Al_2O_3, fib. dms., works lb. .19 - —
fib. dms., contract, works. lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2680- —
pigs, 10,000-lb. lots, frt. alld lb. .2470- —
Aluminum oxide, amorphous (See Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .69½- —
Standard grade, dms. lb. .47 - —
Aluminum powder, lining, extra-fine, dms lb. 1.11 - —
Standard grade, dms. lb. .81 - —

Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Aluminum resinate, precip., 2.1% t.l.t., dms lb. .36¼- —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Monobasic, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Tribasic, ctns., c.l. lb. .29 - —
ctns., l.c.l. lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton 41.00 - —
grd., bulk, c.l., same basis ton 40.00 - —
lump, bgs., c.l., same basis ton 44.00 - —
Coml., iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., dms., works lb. .30 - —
powd., dms., works lb. .37 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots. oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd lb. .49 - —
tanks, dlvd. lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. lb. .45 - —
tanks, frt. alld. lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. lb. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.55 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ton 84.00 - —
refrigeration, tanks, works, frt. equald E. of Rockies ton 86.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton 87.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal. gray, bgs., cl., works, frt, equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton 325.00 - —
dms., ton lots, ex whse. 100 lbs. 20.40 - —
dms., smaller lots, ex whse. 100 lbs. 21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works 100 lbs. 9.00 - —

Ammonium bichromate, dms., works lb. .42 - .43
Ammonium bifluoride, dms., dlvd lb. .2145 - .2245
Ammonium bromide, NF, dms., c.l., t.l., frt. equald lb. .44 - —
dms., l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l. lb. .15½- —
Ammonium chloride, tech., fine gran., bgs., c.l., works 100 lbs. 5.75 - —
bgs., l.c.l., works 100 lbs. 7.75 - 8.20
USP, gran., fib. dms. lb. .17¼- —
Ammonium citrate, dibasic, 250-lb. dm., f.o.b. works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., l.t.l., frt. alld lb. .21½- —
tanks, frt. alld lb. .19½- —
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium lignin sulfonate bgs., c.l., works 100 lbs. 3.25 - —
bgs., l.c.l., works 100 lbs. 3.40 - 3.65
Ammonium molybdate, CP, cryst., fib. dms. 15,000 lbs. works lb 1.21 - —
fib dms., 2,000-lb contracts, works lb. 1.23 - —
single fib. dms., works lb. 1.24 - —
Ammonium nitrate, dom. fertilizer grade, 33.5% N bags., f.o.b. works ton.63.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price. ton.63.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va. ton.48.00 - —
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b. works E lb. .28½- —
powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse. 100 lbs.14.23 - —
bgs., smaller lots, ex whse. 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works. lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Ammonium phosphate, dibasic, NF V bbls. dms lb. .46 - —
Ammonium phosphate, tech., bgs., c.l., works, frt. equald. lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Ammonium silicofluoride, dms., works lb. .11¾- .13¼
Ammonium sulfamate bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l. works lb. .20½- .27
Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton.32.00 - —
purif., bgs., f.o.b. works lb. .08½- .15
large granular, bulk, c.l., works. ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., l.c.l. t.l., works—100 lbs 3.20 - 7.20
Ammonium sulfide, liq., 40-44%, tanks, frt., equald.,100% basis ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms. c.l. works lb. .20 - —
dms., l.c.l., works lb. .22 - .26
tech., soln, 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycollate, coml., cbys., 100% basis lb. 1.35 - 1.65
Highly purif., cbys. 100% basis. lb 1.70 - 1.96
d-Amphetamine hydrochloride, di-basic, bots lb.17.50 -23.00
dl-Amphetamine hydrochloride, di-basic, bots lb. 4.50 - 6.00
d-Amphetamine hydrochloride, mono-basic, dms lb.17.50 21.00
d-Amphetamine phosphate, fib. dms., 100-lb lots lb.15.00 - —
dl-Amphetamine phosphate, dms lb. 4.20 - 5.00
d-Amphetamine sulfate, fib. dms., lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.00
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld E of Rockies lb. .18½- .19
dms., l.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½
Amyl acetate, ex pentane, reg. dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .16½- —
Tech., dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd lb. .18½- —
tanks, dlvd. lb. .14½- —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd lb. .20½- —
tanks, dlvd. lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd.).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
Amyl alcohol, ex pentane, mixed, amyls dms., c.l., frt. alld. lb. .19 - —
dms., l.c.l., frt. alld lb. .20½- —
tanks, frt. alld lb. .16½- —
primary, dms. c.l., frt. alld. lb. .19¾- .20¼
dms., l.c.l., frt. alld lb. .21¼- .21¾
tanks, frt. alld lb. .17¼- .17¾
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works lb. .20½- —
tanks, works lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E lb. .18½- —
tanks, frt. alld E lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½- —
Amyl alcohol, 3-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 1.25
Amyl cinnamic aldehyde, dms lb. 1.75 2.20

p-tert Amyl phenol, dms., c.l., works. lb. .26¾- —
dms., l.c.l., works lb. .27¾- —
Amyl salicylate, cns., dms lb. .73 - 1.08
Amyris oil, dms lb. 1.50 - 1.90
Anethole, USP, cns., dms lb. 1.18 - 1.30
Tech., dms. lb. .92 - 1.00
Angelica root, bls. lb. .90 - 1.00
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline, dms., c.l., frt. alld lb. .20 - —
dms., l.c.l., frt. alld. lb. .21 - —
tanks, frt. alld. lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms. lb. 1.75 - 3.00
Anise seed, Mexican, bgs lb. .22 - —
Spanish, bgs. lb. .19 - —
Anisic aldehyde, dms. lb. 1.85 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l., f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt. alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines lb. .29½- —

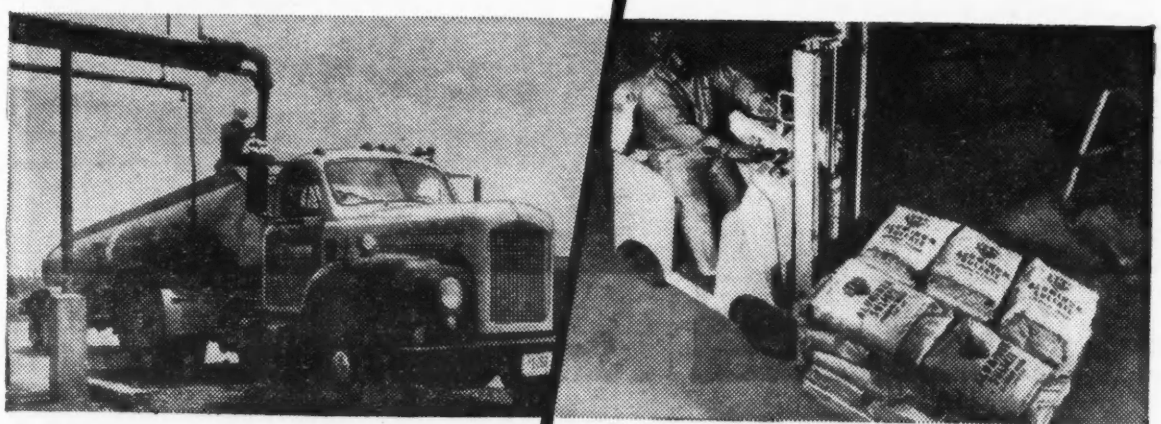
Antimony oxide, bgs., c.l., frt. alld. lb. .24½- —
bgs., l.c.l., frt. alld. lb. .26 - —
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb. dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis lb. .74½- —
Antipyrine, NF, 200-lb. bbls lb. 3.50 - —
Apomorphine hydrochloride, USP, 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .75 - 1.00
Arabic gum, amber sorts, 10 bgs. lb. .28 - —
USP, powd., bbls lb. .33 - —
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tin oz. 4.00 - 4.50
1-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
1-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
1-Arginine hydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .95 - —

Arsenic, crude (95%), bulk, c.l., works lb .016 - —
bbls., c.l., works lb .031 - —
Arsenic trioxide, USP, dms lb 48 - —
Arsenic, white, powd., bbls., c.l., works lb .04½- —
bbls., l.c.l., works lb .06½- .07¼
Arsenous acid, tech (see Arsenic, white).
Arsenous acid USP (see Arsenic trioxide)
Arylid maroons, deep shades, bbls. lb 3.70 - —
Light shades, bbls. lb 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons) mines ton.86.00 - —
7D, c.l. (30 tons) mines ton.75.00 - —
7F, c.l. (30 tons) mines ton.71.00 - —
7H, c.l. (30 tons) mines ton.61.00 - —
7K, c.l. (30 tons) mines ton.50.00 - —
7M, c.l. (30 tons) mines ton.44.00 - —
7R, c.l. (30 tons) mines ton.43.00 - —
7RF, c.l. (30 tons) mines ton.44.00 - —
7T, c.l. (30 tons) mines ton.41.00 - —
7TF c.l. (30 tons) mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, 25, 50-kilo dms., kilo.10.00 - —
10 kilo dms. kilo.10.35 - —
5-kilo dm kilo.10.75 - —
1-kilo bottle kilo.11.00 - —
500-gram bottle kilo.11.50 - —
Ash black (see Barium sulfide).

When it comes to

ALUM

liquid or dry



Come to

GENERAL CHEMICAL

As one of America's primary producers of aluminum sulfate, General Chemical has established a network of strategically located plants from coast to coast. Those listed above can provide you with a close, convenient source of supply. These modern plants are located in the heart of active consuming areas. They facilitate service to you. They save transportation costs. In addition, our chain of warehouses across the country makes stocks of dry aluminum sulfate readily available everywhere. Write or phone today for further information on how these facilities can be put to work for you.

ATLANTA, GA.
CHILLICOTHE, O.
CLEVELAND, O.
DENVER, COLO.
DETROIT, MICH.
E. ST. LOUIS, ILL.
HOPEWELL, VA.
JACKSONVILLE, FLA.
JOHNSONBURG, PA.
KALAMAZOO, MICH.
KENNEWICK, WASH.
MACON, GA.
MARCUS HOOK, PA.
MENASHA, WIS.
MIDDLETOWN, O.
MONROE, LA.
NEW ORLEANS, LA.
PINE BLUFF, ARK.
PORT ST. JOE, FLA.
SAN FRANCISCO (PORT CHICAGO), CALIF.
SAVANNAH, GA.
TACOMA, WASH.
VANCOUVER, WASH.
WISCONSIN RAPIDS, WIS.

Basic to America's Progress

Allied Chemical

GENERAL CHEMICAL DIVISION

40 Rector Street, New York 6, N. Y.

Asphalt—Black Haw Tree Bark

Asphalt, gilsonite, black jet, bgs., c.l., mines ton.40.00 - —
ex-whse, N. Y. N. J ton.86 50 - —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton.35.00 - —
select, 350°F. fusing pt., bgs., c.l., mines ton.41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton.40.00 - —
Manjak No. 10 crude, dms., works. lb. .07 - —
Petroleum, cut-back, tanks, tank-wagon, refy gal. .09½ - —
emulsion tanks tankwagon, refy. gal 09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy.ton.21.00 - —
85-300 penetration tanks, tank wagon, refy ton.20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz 5.75 6.50
Atropine sulfate, USP, bots oz. 5.25 - 5.75
Avocado oil, f.o.b. Calif., cns lb. 2.25 3.00

B

Bacitracin, bulk, 1,000,000.000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs. lb. .50 - —
Barbital, NF, 100-lb. dms. lb 4.56 - —
Barbital sodium, NF, dms. lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton.111.50 - —
bgs. smaller lots, works ton.126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride, annyd bgs., c.l., works ton.176.00 - —
bgs., l.c.l., works ton.196.00 - —
Barium chloride, NF, cryst., 100 lb. dms lb. .22 - —
Tech., cryst. bgs., c.l., works. 100 lbs 7.00 - —
bgs., l.c.l., works 100 lbs. 8.00 - —
Barium chromate, bgs. frt. equald.lb .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 - —
bgs. l.c.l., l.t.l., frt equald ton.218 00 - —
Barium monohydrate, 99%, bgs., c.l, frt. equald 100 lbs.11.25 - —
bgs., l.c.l., frt. equald 100 lbs.11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls. c.l., t.l., dlvd. lb. .16 - —
bbls., l.c.l., l.t.l., dlvd. lb. .17 - —
Barium oxide, grd., dms., c.l. t.l., frt equald ton.275.00 - —
dms., l.c.l., l.t.l., frt. equald. ton.285.00 - —
Barium peroxide, dms. frt. equald. lb. .20 - —
Barium stearate, ctns., c.l. frt. alld. lb. .41 - —
ctns., l.c.l., same basis lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm.lb. .19½- —
Barium sulfide, dms., c.l., works. ton.100.00 - —
dms., l.c.l., works ton.110.00 - —
Barytes, southern, off-color, bgs., mines ton.25.00 - —
95-75%, bgs., mines ton.25.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton.55.00 -55.25
paper bgs., ex whse., New York ton.79.85 - —
Battery acid, cbys. c.l. works, E. 100 lbs. 2.35 - —
cbys., l.c.l., works, E 100 lbs. 2.65 -10.95
Bauxite, bulk, mines ton 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55% cns lb. 2.25 - 2.75
55-60%, cns lb. 2.50 - 3.05
West Indian, 50-55%, cns., dms., lb. 2.30 - 3.00
Bayberry wax, bgs. lb. .45 - .47
Beeswax, crude, African, bgs. lb. .55 - .56
Brazilian, bgs. lb. .56 - .57
Central American, bgs. lb. .53 - .54
Chilean, bgs. lb. .56 Nom.
Refd., USP bleached white, bricks, 100-lb. ctns lb. .69 - .71
white, slabs, 100-lb. ctns. lb. .68 - .70
yellow, bricks, 100-lb. ctns lb. .59 - .61
yellow, slabs, 100-lb. ctns. lb. .58 - .60
Belladonna leaf, bls. lb. .26 - —
Belladonna root, bls. lb. .28 - —
Bentonite, dom. 200 mesh, bgs., c.l., mines ton.14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton.95.20 - —
bgs., 1-ton lots, ex whse ton.99.00 - —
Imp., Italian, white, low gel., bgs., 5-ton lots, ex whse ton.93.40 - —
bgs., 1-ton lots, ex whse ton.97.16 - —
Benzal chloride, cbys., works lb .44 - —
Benzaldehyde, NF, dms. lb. .80 - .88
Tech., dms., c.l., t.l. lb. .47 - —
dms., l.c.l. lb. .48 - —
Benzene, coaltar, pure or nitration, tanks, works:
Bethlehem, Pa. gal. .31 - —
Birmingham district gal. .31 - —
Chicago district gal. .31 - —
Cleveland district gal. .31 - —
Geneva, Utah gal. .31 - —
Johnstown, Pa. gal. .31 - —
Lackawanna, N. Y. gal. .31 - —
Lone Star, Tex. gal. .31 - —
Lorain, Ohio gal. .31 - —
Middletown, Ohio gal. .31 - —
Minnequa, Colo. gal. .31 - —
Philadelphia district gal. .31 - —
Pittsburgh district gal. .31 - —
Sparrows Point, Md. gal. .31 - —
Syracuse, N. Y. gal. .31 - —
Terre Haute, Ind. gal. .31 - —
Youngstown, Ohio gal. .31 - —
Benzene, petroleum, nitration or industrial, Houston, Tex., tanks, gal. .31 - .33
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, dms., c.l., dlvd., gamma unit-lb. .00825- —
dms., l.c.l., works gamma unit-lb. .009 - .0095
low gamma, dms., c.l. dlvd. gamma unit-lb. .00825- —
dms., l.c.l., works gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls. dlvd. lb. 2.30 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls., dlvd. lb. 3.40 - —
Benzocaine, dms. lb. 3.48 - 3.50
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld lb. .37 - —
bbls., dms., ton lots, same basis lb. .41 - —
bbls., dms., 1,000-lb. lots, same basis lb. .43 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb. lots lb. .50 - —
Benzoin gum, Sumatra, cs. lb. .33 - —

Benzol

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

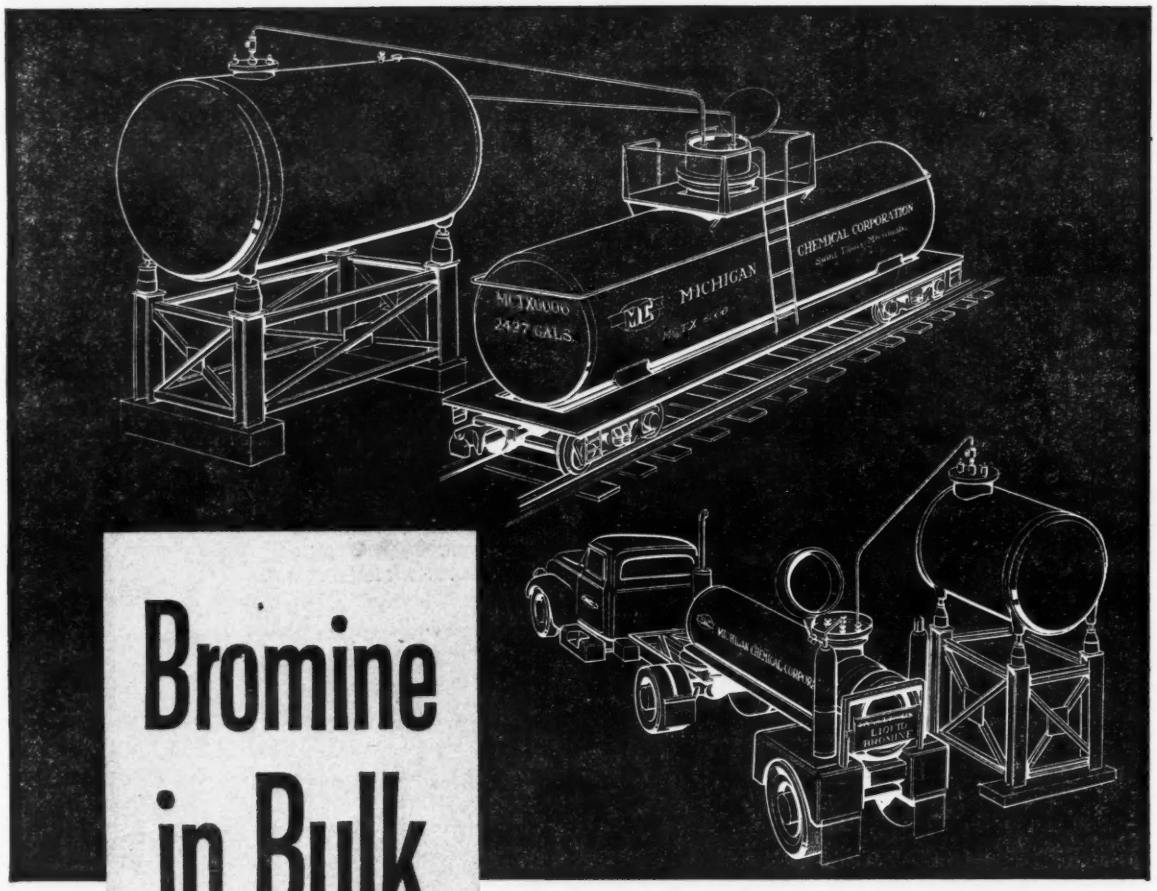
Benzophenone, dms. lb. 1.40 - 1.65
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt., equald lb. .21 - —
cbys, smaller lots, frt., equald lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt., equald lb. .22 - —
cbys., l.c.l., same basis lb. .23 - —
tanktrucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms lb. .58 - .79
Benzyl alcohol, NF, dms. lb. .58 - .80
Tech., dms., dlvd. lb. 47½- .65
Benzyl benzoate, USP, NF, 40-lb. dms lb. .68 - —
Benzyl chloride, tech., cbys., dms., c.l., works, frt., equald lb. .22½- .25¼
cbys., dms., l.c.l., same basis lb. 23½- 25½
tanktrucks, dlvd., Metropolitan area lb. .21 - —

A 2½c. differential is quoted on benzyl chloride in 5-gal cbys. In steel dms. prices are ½c. lower.

Benzyl cinnamate, cns. lb. 3.30 - 3.60
Benzyl dimethylamine, dms., works. lb. 2.25 - —
Benzyl formate, cns. lb. 1.85 - 2.10
Benzyl isoeugenol, cns. lb. 9.25 - —
Benzyl propionate, bots. lb. 1.35 - 1.65
Benzyl salicylate, bots. lb. 1.60 - 1.85
Benzylidine acetone, bots. lb. 1.75 - 1.80
Benzylidine chloride, (see Benzal chloride).
Berberine bisulfate, cns. lb.48.50 - —
Berberine hydrochloride, bots lb.48 50 - —
Bergamot oil, nat., NF, Italian, cns. lb.12.60 -14.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid)
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol)
Betanaphthylamine (see b-Naphtholamine)
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots. gram.10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns. lb. 1.50 1.90
Rectified, cns. lb. 1.75 2.00
Bismuth chloride, tars lb. 5.11 —
Bismuth hydroxide, dms. lb 4.60 4.65
Bismuth metal, bxs., ton lots lb. 2.25 - —
Bismuth nitrate cryst. dms. lb. 2.08 2.17
Bismuth oxide, anhyd., 100-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth subcarbonate, USP dms.lb. 3.20 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb. 3.15 - —
Bismuth subiodide, NF, fib dms lb 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 2.65 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .29½- —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs. l.c.l. same basis lb. .31 - —
Blackberry root bark, bls. lb. .50 - .55
Black haw root bark, bls. lb. .63 .65
Black haw tree bark, bls. lb. 45 .50

Black Pigments

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.



Bromine in Bulk

Saves Dollars! Saves Time!

LOOK AT THESE ADVANTAGES: Thousands of dollars a year can be saved by converting facilities to receive bromine in bulk. For example, with tank car orders, you save 9½¢ a lb. as compared to the drum price; 10½¢ a lb. over bottles. With tank truck orders, you save 7¢ a lb. over drums and 8¢ a lb. over bottle shipments. You will free considerable capital now tied up in container deposits. Finally, you will save both time and money now used in handling the smaller bromine containers.

BULK STORAGE PAYS OFF FAST! If you use as little as 60,000 lbs. of bromine a year, delivered by tank truck, you can save the cost of the necessary 1000 gal. bulk-storage installation in about a year.

Tank cars are available in 60,000 lb. and 100,000 lb. capacities. Tank trucks contain 14,000 lbs. each.

WE CAN SHOW YOU HOW! Our experience in the storage and handling of bromine is extensive and we want to share it with you. If you would like engineering prints, specifications, and technical counsel, get in touch with us. Michigan Chemical also offers you these advantages: A steady, uncommitted supply of bromine at tonnage prices; and a large bromine bulk fleet for prompt service.

Bulk shipments from: El Dorado, Arkansas and Manistee, Michigan. Drums and bottles from Manistee and convenient warehouse locations.

For complete listing of Michigan Chemical products, see your copy of OPD Buyers Directory Issue, Chemical Materials Catalog or Chemical Week Buyers Guide.

MICHIGAN CHEMICAL CORPORATION

643 North Bankson Street, Saint Louis, Michigan

EASTERN SALES OFFICE: 230 Park Avenue, New York 17, N. Y.

C-59-1

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Blanc fixe, direct process, bgs. c.l., works ton.145.00 - —
bgs., l.c.l., works ton.155.00 - —
bgs., l.c.l., New York whse ton.195.00 - —
Blood, dried, 16-16½% ammonia, unit-ton. 5.00 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago. unit-ton. 5.00 - —
Bloodroot, bls. lb. .50 - .55

Blue Pigments

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms lb 1.90 - 2.55
Peruvian, dms. lb. 1.80 2.25
BON acid maroons, pure, bbls lb. 1.75 - —
Resinated, bbls. lb. 1.50 - —
Bone black, dms., l.c.l. frt. alld lb. .18 - .22¾
Pacific coast bone black prices 2c. per lb. higher.
Bonemeal, steamed, works, E ton.75.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic)
Borax, tech., anhyd, 99½%, bgs., c.l., works ton.92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 - —
bgs., smaller lots, same basis 100 lbs. 8.67 -10.67
bulk, c.l., works ton.83.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton.50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.32 - —
bgs., smaller lots, same basis. 100 lbs. 6.57 - 8.57
bulk, c.l., works ton.43.50 - —
gran., pentahydrate, 99½%, bgs., c.l., works ton.64.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 - —
gran., pentahydrate, 99½%, bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ton.58.00 - —
powd., USP, bgs., c.l., works. ton.54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.45 - —
bgs., smaller lots, same basis. 100 lbs. 7.70 - 9.70
Bordeaux powder, tribasic, bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —
Boric acid, tech., anhyd., 99.9%, bgs., c.l., works ton.335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.19.62 - —
bgs., smaller lots, same basis. 100 lbs.20.87 -22.87
cryst., 99.9%, bgs., c.l., works. ton.163.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.11.05 - —
bgs., smaller lots, same basis. 100 lbs.12.30 -14.30
dms., c.l., works ton.188.50 - —
dms., ton lots, ex whse., New York or Chicago. 100 lbs.12.30 - —
cryst., bgs., smaller lots, same basis 100 lbs.13.05 - —
gran., 99.9%, bgs., c.l., works. ton.112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 8.47 - —
bgs., smaller lots, same basis. ton.174.25 - —
dms., c.l., works ton.137.00 - —
dms., ton lots, ex whse, New York or Chicago 100lbs.9.72 - —
dms., smaller lots same basis. 100 lbs.10.47 - —
bulk, c.l., works ton.106.00 - —
powd., bgs., c.l., works, ton lots, ex whse, New York or Chicago 100 lbs. 8.85 - —
bgs., smaller lots, same basis. 100 lbs.10.10 -12.10
dms., smaller lots, same basis 100 lbs.11.45 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 - —
100-lb. cyls., works lb. 1.70 - —
Boron trifluoride, gas, cyls, t.l., works lb. .70 - —
cyls., l.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E of Rockies lb. .32 - —
c.s., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½ - —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys lb. 1.80 - 1.90
Bromstyrol, bots. lb. 5.45 - 5.70
Brucine, cns. oz. 1.50 - 1.75
Brucine sulfate, NF, cns. oz. 1.50 - 1.75
Buchu leaves, bls. lb. .95 - 1.05

Brown Pigments

Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy lb. .21 - —
cyls., l.c.l., refy lb. .22 - —
tanks, dlvd. lb. .14½ - —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd.E lb. .14¾ - —
dms., l.c.l., same basis lb. .16¼ - —
tanks, same basis lb. .12¼ - —

n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E. lb. .42½ - —
dms., l.t.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Prices of n-butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .17½ - —
dms., l.c.l., frt. alld lb. .19 - —
tanks, frt. alld lb. .15 - —
Syn., dms., c.l., dlvd lb. .17½ - —
dms., l.c.l., frt. alld lb. .19 - —
tanks, dlvd. lb. .15 - —
Butyl alcohol, sec-synthetic, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16½ - —
tanks, dlvd lb. .12½ - —
Butyl alcohol, tert-synthetic, dms., c.l., frt. alld. dlvd. E lb. .15 - —
dms, l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½ - —
dms., l.c.l., works lb. .38¼ - —
n-Butyl ether, dms., c.l., works lb. .35¼ - —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼ - —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½ - —
dms., l.c.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½ - —
Butyl oleate, refd., dms., l.c.l., works lb .32 - —
Butyl phenylacetate, dms., lb 4.50 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E of Mississippi lb. .27¼ - —
dms., l.c.l., same basis lb. .28¼ - —
Butylamine (see Mono-, Di- and Tributylamine)
6-tert-Butyl-m-cresol (see mono-tert-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., dlvd. lb. .27½ - —
bgs., l.c.l., works lb. .28½ - —
Butyraldehyde, dms., c.l., dlvd lb .22 - —
dms., l.c.l., dvld. lb. .23½ - —
tanks, dlvd lb. 19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt. alld. E. of Rockies lb. 5.33 - —
Light shade, bbls., same basis lb. 4.45 - —
Cadmium CP red, medium shade, bbls., same basis lb. 5.10 - —
Medium light shade, bbls., same basis lb. 4.70 - —
Orange-red shade, bbls., same basis lb. 4.10 - —
Yellow, all shades, bbls., frt. alld. E. of Rockies lb. 3.65 - —
Cadmium iodide, 25-lb. fib. dms. lb 6.75 7.00
Cadmium metal, ingots or sticks, cs., dlvd lb. 1.30 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld. E. of Rockies lb. 1.58 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis.lb. 1.88 - —
Red, light shade, bbls. same basis. lb. 1.65 - —
Red, medium shade, bbls., same basis lb. 1.80 - —
Red, medium light shade, bbls., same basis lb. 1.73 - —
Red, maroon shade, bbls., same basis lb. 1.96 - —
Cadmium-selenide lithopone maroon, bbls., frt. alld. E. of Rockies. lb. 2.69 - —
Maroon, dark shade, bbls., same basis lb. 2.74 - —
Orange, bbls., same basis lb. 1.51 - —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.59 - —
Red, dark shade, bbls., same basis. lb. 2.49 - —
Red, light shade, bbls., same basis. lb. 1.81 - —
Red, medium-light shade, bbls., same basis lb. 1.93 - —
Red, medium shade, bbls., same basis lb. 2.16 - —
Cadmium-selenide, lithopone yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.12 - —

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MOLECULAR WEIGHT: 53.50

SOLUBILITY IN WATER: 20% at –13°C, 25% at 10°C, 30% at 33°C, 40% at 83°C. Strongly endothermic (lowers solution temperature upon dissolving). Aqueous solubility suppressed by sodium chloride. Slightly soluble in methyl and ethyl alcohol and acetone. Fair solubility in glycerine.

MELTING POINT: Sublimes at 335°C.

pH OF SOLUTIONS: 25°C: 1% 5.5, 3% 5.1, 10% 5.0 (technical grade).

APPEARANCE: White crystals, practically 100% will pass through a No. 20 screen.

REACTIONS: Decomposed in solution by strong alkalies to liberate ammonia. Reacts with nitrites to form nitrogen. Reported to reduce oxides of cobalt and nickel at high temperatures. Hydroxides of nickel, zinc, cadmium and manganese reported to be more soluble in water in presence of ammonium chloride. Acid characteristics cause acceleration of set of urea-formaldehyde resins.

QUALITY: Principal impurity is sodium chloride. Very low in metallic impurities. Technical grade better than 99% NH_4Cl.

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Caffeine—Carotene

Caffeine, NF, citrated, dms., 100-lb. lots or more lb. 2.70 • —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 2.10 • —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 • —
Syn., cryst., anhyd., dms., 100-lb. lots or more lb. 2.10 • —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 • —
Cajuput oil, native cns. lb. 1.75 • 2.55
Redist., USP, cns lb. 1.90 2.10
Calamine, USP, dms. lb. .34 —
Calamus oil, bots lb. 12.00 -20.00
Calciferol, cryst., 10-kilo or more lots, works gram .54 • —
1-10 kilo lots gram .55 • —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate, trihydrate fib. dms., 100 lbs. or more, frt. adjusted lb. 3.10 • —
Calcium arsenate, dealers, bgs., c.l., frt. alld lb. .09 • .09¼
bgs., l.c.l., same basis lb. .10 • .10½
Calcium bromide, NF, 100 lbs or more lb. .97 • —
Calcium carbide, standard generator size, 600-lb dms., c.l., dlvd ton. 149.00 • —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton. 10.50 • —
chalk, whiting, 325 mesh, bgs., c.l., works ton. 32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton. 30.00 • —
10 to 20 microns, bgs., c.l., works ton. 17.00 -18.00

Calcium carbonate, precip., dense, bgs., c.l., works ton. 30.00 -35.00
bgs., l.c.l., works ton. 45.00 -50.00
medium, bgs., c.l., works ton. 38.00 • —
bgs., l.c.l., works ton. 48.00 • —
surface treated, bgs., c.l., works, ton. 40.00 -42.00
bgs., l.c.l., works ton. 55.00 -57.00
ultrafine, bgs., c.l., works ton. 117.50 167.50
bgs., l.c.l., works ton. 137.50 -187.50
Calcium chloride, flake, 77-80%, paper bgs., c.l., works, frt. equald ton. 31.00 • —
Conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald ton. 37.80 • —
Liquor, 40% tanks, frt equald. ton. 12.50 • —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton. 37.00 • —
Purif., gran., dms. lb. .27 • —
Solid, 73-75%, dms., c.l., frt. equald ton. 29.50 • —
dms., l.c.l., works, frt. equald ton. 36.00 -73.00
USP, gran., dms. lb. .32 • —
Calcium chromate, bgs., dlvd lb. .37 • —
Calcium cyanide, dms., c.l., dlvd. E. of Rockies lb. .20 • —
dms., l.c.l., same basis lb. .24 • .55
Calcium cyclamate 100-lb. dms lb. 1.95 • —
Calcium gluconate, USP, powd., 150-lb. dm., ton lb. .66½- —
AA, 150-lb. dm., ton lb. .73½- —

Calcium hydride, lump, dms., works lb. 2.20 • 3.00
Calcium hypochlorite, high test, 45-lb cs., dlvd. E. of Rockies. cs. 22.95 -25.10
100-lb. dms., same basis dm. 30.80 -34.50
Calcium hypophosphite dms., 1,000-lb lots lb. 1.28 • —
Calcium iodide, jars lb. 4.52 • —
Calcium lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 • .40
dms., smaller lots, works lb. .41 • .48
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 • —
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb. .30 • —
Calcium pantothenate, 1-kilo or more. kilo. 35.00 • —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenolsulfonate, dms. lb. 1.24 • 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt equald 100 lbs. 8.25 • —
Calcium phosphate, dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton. 83.25 • —
bgs., c.l., t.l. f.o.b. Texas City works ton. 77.70 • —
bgs., l.c.l., frt. equald ton. 93.25 • —
21% P., bgs., c.l., t.l., frt. equald ton. 94.50 • —
bgs., l.c.l., frt. equald ton. 104.50 • —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bg., c.l. prices
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 7.45 • —
bgs., smaller lots, same basis, 100 lbs. 7.95 • —

Calcium phosphate, tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 • —
bgs., l.c.l., frt. equald. 100 lbs. 10.00 • —
Calcium phytate bgs., 50 lbs. or more, f.o.b. warehouse N. Y. lb. .39 • —
Calcium resinate precip, dms. ton lots, frt. alld., works lb. .36¼- —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 • —
bgs., l.c.l., works lb. .06½- —
Calcium silicate, paint grade (see Wollastonite)
Calcium stearate, ctns., c.l. lb. .39 • —
ctns., l.c.l. lb. .40 • .44
Calcium sulfate (see Gypsum)
Calomel, NF X, powd. 100-lb. dms. lb. 5.42 • —
Camphene 46° m.p., dms. incl., c.l., works lb. .15 • —
dms. incl., l.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene, chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 • 3.70
Camphor, nat., USP, powd., cs., 100-lb. lots lb. .60 • .65
tablets, 1-oz. cs. lb. .85 • .90
USP, gran., powd., bbls., 2,000-lb lots lb. .59 • —
Syn., USP, gran., powd., bbls., 1,000-lb. lots lb. .60 • —
bbls., smaller lots lb. .61 • —
tablets, ctns., 1,000-lb. lots lb. .85 • —
ctns. 500-lb. lots lb. .86 • —
ctns. smaller lots lb. .87 • —
tech., 1 bbl. or more lb. .48 • —
Camphor oil, sassafrassy, dms. lb. .35 • .55
White, dms. lb. .26 • .50
Cananga oil, native, cns. lb. 6.50 • 7.00
Rectified, cns. lb. 8.25 -10.00
Candelilla wax, crude, bgs. lb .53 • .54
Refd., bgs. lb. .57 • .59
Powdered Candelilla wax 20 to 100 mesh, 8c higher.
Cantharides, Chinese, cs. lb. 1.25 • —
powd., bxs. lb. 1.75 • —
Russian, bgs. lb. 2.25 • —
powd., bxs. lb. 2.75 • —
Capric acid, dms. lb. .35½- .38
tanks lb. .33 • —
Capryl alcohol, 85% dms., c.l., and t.l., works lb. .19 • —
dms., l.t.l., same basis lb. .19½- —
tanks, frt. equald lb. .16½- —
Sec. 92-99%, dms., c.l. lb. .22 • —
dms., l.c.l. lb. .23 • —
tanks lb. .19½- —
Caprylic acid, dms lb. .35½- .38
tanks lb. .33 • —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 • —
NF, from African pepper, dms. lb. 4.50 • —
Caraway oil, dms lb. 3.10 3.50
Caraway seed, Danish, bgs. lb. .12¼- —
Dutch, bgs. lb. .13 • —
Polish, bgs. lb. .12 • —
Carbazole, 97%, bbls., ton lots, works lb. 1.05 • —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., works lb. .15½- —
Carbon black, furnace, fast extruding, bgs., c.l., works lb. .06¾- —
ctns., l.c.l., whse. lb. .13½- —
high abrasion, bulk, c.l., works. lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., dlvd. or whse. lb. .14½- —
high modulus, bgs., c.l., works. lb. .06¼- —
ctns., l.c.l., whse. lb. .13 • —
semi-reinforcing, bgs., c.l., works. lb. .05¾- —
bgs., ctns., l.c.l., whse. lb. .12½- —
Carbon black, pigment, high color beads, ctns., c.l., works lb. .72 • —
ctns., l.c.l., dlvd. or whse lb. .79 • —
medium color, uncompressed, bgs., c.l., works lb. .13½- —
bgs., l.c.l., dlvd. or whse lb. .22 • —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E. ton. 60.00 -115.00
bulk, 3,000,000 lbs. of more, dlvd., Metropolitan areas, E. ton. 55.00 • —
Solid, bulk, wholesale, works ton. 85.00 • —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 • —
55-gal. dms., l.c.l., same basis lb. .086 • .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 • —
5-gal. dms., less than 30 dms., same basis lb. .161 • —
tanks, dlvd. lb. .0545- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld lb. .12¾- —
dms., l.c.l., frt. alld lb. .15¼- —
Carbon tetrachloride, tech., consumers, dms., c.l., t.l., frt. alld. lb. .11¾- —
dms., l.c.l., l.t.l., frt. alld lb. .14¼- —
tanks, frt. alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb. lots, works lb. 4.00 • 4.25
dms., smaller lots, works lb. 4.10 • 4.75
Cardamom oil, NF, bots lb. 41.50 -45.00
Cardamom seed, bleached "A" lb. 2.95 • —
Bleached "B" lb. 2.95 • —
Decorticated Alleppey, cs. lb. 2.85 • —
Guatemala, cs. lb. 2.85 • —
Green, Alleppey, bgs. lb. 2.00 • —
Ceylon, bgs. lb. 2.00 • —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb. 16.80 • —
bulk, smaller lots, dlvd. lb. 16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .70 • .71
Nurth country, No. 2, crude, bgs., ton lots lb. .82 Nom.
refd., pure, ton lots lb. .92 • .94
North country, No. 3, Ceara, crude, bgs., ton lots lb. .74 • .78
Ceara, refd., pure, bgs., ton lots lb. .83 • .84
Parnahyba, crude, bgs., ton lots lb. .76 • .77
Parnahyba, refd., pure, bgs., ton lots lb. .83 • .84
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.10 • 1.12
Parnahyba, bgs., ton lots lb. 1.12 • 1.14
Powdered carnauba wax, 20 to 100 mesh, 8c. higher.
Carotene, tech., 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd gram .24¼- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 • —
USP, microcrystalline in oil, 400,000 A units per gram, dms., dlvd. million units. .174 • —

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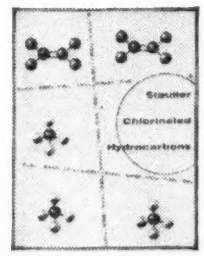
DEPENDABLE SINGLE SOURCE OF 5 CHLORINATED SOLVENTS

The wide distribution of warehouses and central location of manufacturing facilities make Stauffer a dependable, continuous and *flexible* source of Chlorinated Solvents. Plants at Louisville and Niagara Falls... warehouses and distributor points throughout the country are convenient sources for Stauffer Chlorinated Solvents wherever you are located.



Stauffer Chlorinated Solvents meet all standards for purity, exceed many, and are notably high in the case of chloroform. They are shipped in quantities from drums to tank cars. Mixed loads available from Louisville in compartmented cars and trucks. 55-gallon drums in mixed carloads and truckloads from Louisville, Niagara Falls and many distributor points. Send for a brochure on Stauffer's Chlorinated Hydrocarbons.

Stauffer CHEMICALS SINCE 1885

STAUFFER CHEMICAL COMPANY

380 Madison Avenue, New York 17, N.Y.
Prudential Plaza, Chicago 1, Illinois
824 Wilshire Boulevard, Los Angeles 17, California
636 California Street, San Francisco 8, California

b-Carotene in vegetable oil, semi-solid suspension, 400,000 A units per gram, cns.	kilo.	57.60	—
Liquid in vegetable oil, 500,000 A units per gram, cns.	kilo.	72.00	—
Pure, cryst., 1,600,000 to 1,670,000 A units per gram., cns.	kilo.	240.00	—
Carvol, bots.	lb.	5.00	5.40
Cascara sagrada, bark, bulk	lb.	.34	—
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works	lb.	.56	—
edible, acid, precip., 80 mesh, bgs., 10,000-lb lots or more, works	lb.	.64	—
Casein, imp., inedible, acid-precip, grd., Argentine, bgs., c.l., ex-dock, Eastern seaports	lb.	.19¼	.19¾
New Zealand, bgs., c.l., same basis	lb.	.24	.25
Cashewnut shell liquid, treated dms., c.l., Newark, N. J.	lb.	.22	—
dms., ton lots, same basis	lb.	.23	—
dms., dm. lots, same basis	lb.	.25	—
Cassella acid, dms., frt. alld., 100% basis	lb.	1.44	1.75
Cassia, Padang, "A," bls.	lb.	.30	—
"B," bls.	lb.	.29	—
"C," bls.	lb.	.28	—
Korintje "A," bls.	lb.	.29	—
"B," bls.	lb.	.28½	—
"C," bls.	lb.	.27½	—
Cassia oil (see Cinnamon leaf oil, USP).			
Castor oil, dom., blown, dms., c.l.	lb.	.2550	—
dms., l.c.l.	lb.	.2650	—
dehydrated, bodied, dms. c.l.	lb.	.2700	—
dms., l.c.l.	lb.	.2850	—
tanks	lb.	.2500	—
dehydrated, unbodied, dms., c.l.	lb.	.2500	—
dms., l.c.l.	lb.	.2660	—
tanks	lb.	.2360	—
hydrogenated, bgs., c.l.	lb.	.2450	—
bgs., ton lots	lb.	.2850	—
bgs., l.c.l., dlvd	lb.	.3050	—
No. 1, dms., c.l.	lb.	.2150	—
dms., l.c.l.	lb.	.2250	—
tanks	lb	.1950	—
No. 3, tech., dms., c.l.	lb.	.2125	—
dms., l.c.l.	lb.	.2225	—
tanks	lb.	.1925	—
refd., deodorized, dms., c.l.	lb.	.2650	—
dms., l.c.l.	lb.	.2750	—
USP, dms., c.l.	lb.	.2350	—
dms., l.c.l.	lb.	.2450	—
tanks	lb.	.2150	—
Imported, No. 1, Brazilian, tanks.	lb.	.16¾	—
Castor oil, sulfonated, 50%, dms., works	lb.	.15	.15¼
75%, dms., works	lb.	.19	.19½
Castor oil acids, dehydrated, dms.	lb.	.44¼	.46¼
Split, dms.	lb.	.37¼	.38¼
Castor pomace, bgs., c.l., works	ton.	35.00	—
Castoreum, nat., cns.	lb.	5.25	—
Syn., cns.	lb.	9.00	—
Catechol, CP, cryst., fib., dms., works	lb.	2.17½	—
Resub., dms., works	lb.	4.29½	—
Catnip leaves, Southern, bls.	lb.	.65	.75
Caustic potash (see Potash caustic).			
Caustic soda (see Soda, caustic)			
Cedarleaf oil, USP XIII cns., dms.	lb.	2.85	3.10
Cedarwood oil, cns., dms.	lb.	.51	.65
Celery seed, French, bgs.	lb.	.33	—
Indian, bgs.	lb.	.19	—
Cellulose acetate, flake, powd., bgs. ctns., 100-lb. lots or more, dlvd., E	lb.	.35	.45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E	lb.	.545	.555
27% butyryl content, bgs., dlvd. E	lb.	.595	.605
Cellulose acetate-butyrate, 38% butyryl content, bgs., dlvd. E.	lb.	.545	.555
38% butyryl content, half-second, bgs., dlvd. E	lb.	.545	.555
50% butyryl content, bgs., dlvd., E	lb.	.585	.595
Cellulose gum, methyl (see Methyl Cellulose).			
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt. alld	lb.	.57	—
bgs, smaller lots, same basis.	lb.	.59	—
Cerium chloride, 46% dms., dlvd	lb.	.25	—
Cerium hydrate, 74% CeO fib. dms., 100-lb. lots or more	lb.	1.40	—
77% CeO, fib. dms. 100-lb. lots or more	lb	1.74	—
Cerium oxalate (see Rare earth oxalate).			
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd	lb.	1.85	1.90
bgs., smaller lots, dlvd.	lb.	1.95	—
Cetyl alcohol, NF, fib. cns., c.l., t.l., dlvd. E	lb.	.41½	—
fib. cns., l.c.l., same basis	lb.	.43½	—
tanks, same basis	lb.	.39	—
Cetyl alcohol, NF, special, fib. cns., c.l., t.l., dlvd. E	lb.	.48½	—
fib. cns., l.c.l., same basis	lb.	.50½	—
tanks, same basis	lb.	.46	—
Chalk (see Calcium carbonate).			
Chamomile flowers, Hungarian, bls.	lb.	1.75	—
Roman, cs.	lb.	1.50	—
Chamomile oil, blue Hungarian, bots	lb.	350.00	—
Charcoal, activated, NF, fib. dms., c.l., works	lb.	.25	.32
fib. dms., 5-ton lots, works	lb.	.26½	.32½
fib. dms., smaller lots, works	lb.	.27	.50
Charcoal, black (see Charcoal, activated).			
Charcoal, bone (see Bone black).			
Charcoal, hardwood, lump, bulk, c.l., f.o.b. plant	ton.	55.00	—
briquets, bulk, c.l., f.o.b. plant.	ton.	78.00	80.00
5-lb. paper bgs., c.l., same basis	ton.	106.00	—
25-lb. paper bgs., c.l., f.o.b. plant	ton.	87.00	—
40-lb. paper bgs. c.l., same basis	ton.	84.00	—
Chenopodium oil, NF, cns.	lb.	4.15	5.00
Chicago acid paste, bbls. frt. alld.	lb.	3.21	—
Chinawood oil (see Tung oil).			
Chloral, tech, 94% min. dms., c.l., works	lb.	.23	—
dms., l.c.l., works	lb.	.24	—
tanks, multiple units, 5 cars, works	lb.	.21	—
Chloral hydrate, USP, jars, 1,000-lb lots	lb.	1.00	—
jars, 500-lb. lots	lb.	1.03	—
jars, 100-lb lots or less	lb.	1.05	—
Chlordan, agricultural dms., c.l., frt. alld	lb.	.65	—
dms. l.c.l. 5,000 to 10,000-lb. lots, frt. alld	lb.	.66	—
Chlordan, clarified, dms. c.l., frt. alld	lb.	.69	—
dms., l.c.l., 5,000-10,000-lb lots, frt. alld	lb.	.70	—
Chlorinated paraffin, 42%, dms., c.l. frt. alld	lb.	.16¼	—
dms. l.c.l. 10 dms. or more, same basis	lb.	.17¼	—
Chlorinated paraffin, 70%, dms., c.l., same basis	lb.	.18½	—
dms. l.c.l. 10 dms. or more, same basis	lb.	.19½	—
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works	lb.	.60	—
ctns., l.c.l., works	lb.	.61	—
125, 1,000 cps., ctns., c.l., works.	lb.	.70	—
ctns., l.c.l., works	lb.	.71	—
Chlorine, liq., cyls., c.l., works, frt. equald	lb.	.11	—
cyls., l.c.l. Metropolitan area	lb.	.12½	.13¾
tanks, single units, works, frt. equald 100 lbs.		3.15	—
tanks, multiple units, 5 cars, works, frt. equald 100 lbs.		4.05	—
tanks, multiple units, 4 cars, same basis 100 lbs.		4.25	—
tanks, multiple units, 2 cars, same basis 100 lbs.		5.25	5.75
tanks, multiple units, 1 car, same basis 100 lbs.		6.25	7.25
Chloroacetic acid, mono, flake, 99%, dms., c.l	lb.	.23½	.25½
dms., l.c.l.	lb.	.24½	—
tech. flake, 96-97%, dms., c.l., frt. equald	lb.	.19	—
dms., l.c.l., frt. equald	lb.	.20	—
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld	lb.	1.03	—
4-Chloro-2-aminotoluene, fused, bbls.	lb.	1.38	—
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld	lb.	.66	—
m-Chloroaniline, dms., c.l., frt. alld.	lb.	.75	—
dms., l.c.l., same basis	lb.	.77	—
tanks, same basis	lb.	.73	—
o-Chloroaniline, dms., c.l., frt. alld.	lb.	.52	—
dms., l.c.l., same basis	lb.	.54	—
tanks, same basis	lb.	.50	—
p-Chloroaniline, dms., c.l., frt. alld.	lb.	.77	—
dms., l.c.l., same basis	lb.	.79	—
o-Chlorobenzaldehyde, dms., t.i., works, dlvd. to N.Y. Metropolitan area	lb.	1.05	—
dms., l.t.l., same basis	lb.	1.20	—
p-Chlorobenzaldehyde, dms., l.c.l., works, dlvd. to N. Y. Metropolitan area	lb.	1.95	—
o-Chlorobenzoic acid, fib dms., t.l., works	lb.	1.10	—
fib. dms., smaller lots, works	lb.	1.25	—
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works.	lb.	2.25	—
fib. dms., less than 2,000-lbs., same basis	lb	2.30	—
Chloroform, tech., dms., c.l., dlvd. E	lb.	.18	—
dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.17	—
USP, dms., c.l., dlvd	lb.	.27	—
dms., l.c.l., dlvd	lb.	.30	—
tanks, minimum 4,000 gals., dlvd.	lb.	.25	—
2-Chloro-4-nitroaniline, paste, dlvd. E, 100% basis	lb.	.81	—
Powd. dlvd. E. 100% basis	lb.	.86½	—
4-Chloro-2-nitroaniline, powd., dlvd. E	lb.	.80½	—
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld	lb.	.73	—
4-Chloro-2-nitrotoluene tech., solid, dms., frt. alld	lb.	.99	—
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld	lb.	.17	—
o-Chlorophenol, dms., c.l., frt. equald	lb.	.37	—
dms., l.c.l., same basis	lb.	.38	—
p-Chlorophenol, dms., c.l., frt equald	lb.	.37	—
dms., l.c.l., same basis	lb.	.38	—
Chloropicrin, coml., cyls., 130 lbs. frt alld	lb.	1.07	—
cyls. 100 lbs. same basis	lb.	1.08	—
cyls., 50 lbs., same basis	lb.	1.14	—
Chlorosulfonic acid, dms., c.l., frt. equald	lb.	.0465	—
dms., l.c.l., frt. equald	lb.	.0515	—
tanks, frt. equald	lb.	.0415	—
Chlorosulfonic acid, in stainless steel dms. ½c. per lb higher			
o-Chlorotoluene, tech., dms., t.l., works	lb.	.37	—
dms., l.c.l., l.t.l., same basis	lb.	.38	—
Choline bitartrate, fib dms. frt. adjusted	kilo.	2.75	3.00
Choline chloride fib. dms. frt. adjusted	kilo.	2.75	3.00
Choline dihydrogen citrate, fib. dms., frt adjusted	kilo	2.75	3.00
Chrome green, CP, dark, ugnt medium blue content 1-15%, bbls., dlvd. E of Rockies	lb.	.40	.42
blue content 16-30%, bbls., same basis	lb.	.40	.42
blue content 31-45%, bbls., same basis	lb.	.41	.43
blue content 45-49%, bbls., same basis	lb.	.44	.46
Reduced color, 25%	lb.	.19	.20
Chrome green prices 1c. higher W. of Rockies.			

In the stomach, stubborn integrity;

in the intestine, swift dissolution—

***en français,* an accolade for**

cellulose acetate phthalate

In Paris, the City of Light, at 23, rue de l'Ecole-de-Médecine, there has been published a brochure prepared by the late Albert Couvreur and collaborators, and bearing the title, "Les enrobages modernes des dragées et des pilules." It devotes itself in part to cellulose acetate phthalate, a substance of our invention.

States this magnificent document (as inadequately rendered into the English tongue by our own poor efforts):

"But the largest part of our work was reserved for cellulose acetate phthalate. This product is extremely insoluble in the acid solutions and its solubility in pancreatic medium is due in part to a fermenting action which can be produced independently of pH, but can equally work in an alkaline medium. According to the fine demonstration of our co-worker . . . cellulose acetate phthalate is an ester which is hydrolyzed by esterase with a formation of acetic and phthalic acids and this explains all the interest in this new coating.

"We believe we have demonstrated that it combines all the qualities required of a true enteric coating: First, it is devoid of all toxicity; Second, the formula which we have used combines the conditions for forming on a core a coating layer of uniform distribution.

"Moreover, the numerous experiments effected, 'in vitro' and 'in vivo' gave absolutely corresponding results and demonstrated that: thirdly, acetate phthalate coating resists perfectly prolonged passage in the stomach surpassing, by far, even the base criteria which we have established.

"Fourthly, it disappears very rapidly in an intestinal medium and in a lapse of time which we may estimate as under a half hour, whether the medium be alkaline or acid. This last peculiarity, characteristic of acetate phthalate, ranks this coating incontestably at the head of all those which we have tried and allows us to conclude that among these it is practically the only one responding exactly to the requirements of the trade.

"Two important factors remain which we must not overlook in that they concern the pharmaceutical industry. Fifthly, the technique of applying this coating is extremely simple and rapid, and sixth, its price is slightly higher than that of other enteric coatings, but it remains within the normal limits and does not otherwise appreciably influence the cost of manufacture."

We shall gladly and at our own expense provide a translation of fifty pages from this comprehensive study of enteric coatings. Our distribution of the translation is not to be construed as adopting or recommending anything said or reported therein. Legal personalities stress this point.

The true, genuine Eastman Cellulose Acetate Phthalate (which has been applied to well over a billion doses during the past 18 years) bears the trademark "C-A-P." For the translation, procedural bulletin, descriptive folder, and prices, write ***Distillation Products Industries,*** Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.

DPi

Also vitamins A and E . . . distilled monoglycerides . . . some 3700 Eastman Organic Chemicals for science and industry

Distillation Products Industries *is a division of* **Eastman Kodak Company**

Chrome orange, CP, bbls., dlvd. E. of Rockies lb. .31½- —
Chrome orange prices 1c. higher W. of Rockies
Chrome yellow, CP, bbls., dlvd. E. of Rockies lb. .31½- —
Chrome yellow price 1c. higher W. of Rockies
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
dms. l.c.l. dlvd N Y Metropolitan area lb. .30 .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln. 7½%, dms., 500-2,000-lb lots, works, lb. .10 - —
NF yellow broken bgs. lb. .35 .40
Chromium oxide, hydrated, bbls., fib dms., c.l. frt alld lb 1.20 —
Pure, bgs., c.l., frt alld lb 44½- —
bgs. l.c.l. same basis lb 45¼- —
Chromium trioxide NF bots lb 1.15 —
Cinchona bark, NF, red, broken, bgs lb. .25 - —
Chromium fluoride bbls., works lb 51 .52
Cinnamic acid, refd bots lb 2.50 3.50
Cinnamic alcohol, bots lb 1.90 2.20
Cinnamic aldehyde, dms lb. .92 1.25
Cinnamon, Ceylon, No. 2, bgs lb. .69 - —
Ceylon, No. "0000," bgs lb. .78 - —
Cinnamon bark oil, bots lb 35.00 70.00
Cinnamon leaf oil, crude, dms lb 1.35 2.00
USP (Cassia), cns. dms lb 8.50 13.50
Citral, CP, bots lb. 3.00 - 3.25
Extra, bots. lb. 3.45 5.05
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. 29½ .30
bgs. dms. 10,000-lb lots, 1 shipt lb. .30 .30½
bgs., dms., smaller lots lb. 30½ .31
Citric acid, USP, hydrous, fine gran. bgs., dms., c.l lb. 27½- .28
bgs. dms. 10,000-lb lots, 1 shipt lb. .28 .28½
bgs., dms., smaller lots lb. .29 .29½
Powdered citric acid ½c. per lb. higher.
Citronella oil, Ceylon, dms lb. .65 - 1.05
Java-type, dms. lb. .75 - 1.20
Citronellal, bots., dms lb. 1.60 - 2.10
Citronellol, bots., dms lb. 2.30 - 3.70
Civet, artif. bots. lb 13.75 15.00
Nat. bots oz. 8.50 15.00
Clay, ball, dom. airfloated, bgs. c.l. Tenn ton. 17.50 - 21.50
crushed shed moisture, bulk, c.l. Tenn ton 8.00 - 11.00
Clay, ball, imp., airfloated, bgs, c.l., Atl. port net-ton. 42.00 - 45.75
lump bulk Atl port net-ton. 29.50 - 35.75
Clay, China, dom., dry-grd. airfloated, 90% 325 mesh, Georgia, bgs. c.l. works, ton. 10.00 - 12.00
Georgia, bgs. l.c.l. works, ton. 15.50 —
Clay, China, dom., airfloated, 99%, 300 mesh bgs. c.l., Georgia, works ton. 13.50 - 14.50
bgs. l.c.l. ex-wh're ton 35.00 - 36.00
Clay, China, imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me long-ton. 20.00 - 35.00
powd. bgs. c.l. ex dock net-ton. 50.00 —
bgs. l.c.l. ex whse net-ton. 60.00 - 70.00
Cleaner's naphtha, petroleum, 140°F, flash, tanks, east coast, New Jersey and New York gal. 18 - —
tanks, group 3 gal. .15 - .15½
tanks, Houston, Tex. gal. .19 - —
tankwagon, Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Cleve's acid, tech., mixed, solid, dms., frt alld lb. 1.05 - —
Cleve's acid, 1,6, tech. solid, dms., frt. alld lb. .77 - —
1,7, tech., dms., frt alld. lb 2.20 - —
Cloves, Madagascar, bgs lb. .40½- —
Zanzibar, bgs. lb. .42½- —
Clove bud oil, USP, dms lb. 2.70 3.60
Clove leaf oil, crude, dms. lb. 1.38 - 2.10
CMC, crude, 98.4% low or medium vis. bgs. or fib dms., 23,000 lbs. dlvd E., 100% basis lb. .41½- —
96.4% low, or medium vis., bgs. or fib. dms., 23,000 lbs. dlvd E., 100% basis lb. .43½- —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½- —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½- —
CMC, purif high vis. (see Cellulose gum)
CMC, standard low or medium vis., bgs. 23,000 lbs., works, frt. alld lb. .57 - —
bgs. smaller lots same basis, lb. .59 - —
CMC prices W. of the Rockies are 2c. per lb lower and are on a works basis.
Coaltar, crude, resale for solns., tanks, works gal. .17 - —
Coaltar, refd. resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse. gal. .39 - —
tanks works gal. .20½- —
Coaltar pitch, aluminum, bulk, works ton 44.00 - —
Carbon and indust. bulk works ton 44.00 - —
Coaltar pitch, core, bulk, works ton. 40.50 - —
Fiber bulk works ton. 48.00 - —
Roofing, 140-155 F, Federal Specification RP-381 Type 1, tanks, works ton. 41.00 - —
Cobalt acetate, 23.7% Co., dms., dlvd lb. 1.04 - —
Cobalt blue genuine 250 lb. bbls., dlvd E. of Rockies lb 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies
Cobalt blue, imitation (see Ultramarine blue)
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .99 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.05 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq. 6% Co. dms lb. .57½- —
Cobalt metal, 97-99%, dms., f.o.b. carrier lb. 1.75 - —
Cobalt naphthenate, liq. 6% Co., dms. dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co., bbls., dlvd. lb. .80 - —
Cobalt oxide, black, ceramic grade, 72¼-73½% Co., dlvd. E. of Mississippi R lb. 1.33 - —
70-71% Co., kgs. same basis lb 1.29 - —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher.
Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb 1.35 - —
Cobalt resinate, fused, 3% Co., dms. lb 29½- —
Cobalt sulfate, cryst., 21% Co., dms. dlvd lb. .64 - —
Cobalt sulfate, monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co., dms., dlvd. lb. .44 - —
Cocaine, USP, cns., 100-oz lots oz. 17.80 - —
Cocaine hydrochloride, cns., 100-oz lots oz. 13.75 - —
Cocillana bark, bls. lb. .20 - .22
Cocoa butter, bgs. lb. .67 - .72
Coconut oil, crude, tanks, New York lb. .17½- .17¾
tanks, Pac. coast lb. .15¾- —
refd., deodorized, dms. lb. .24 - .25
Coconut oil acids, dist., dms lb. .28½- .31
tanks lb. .26 - —
double dist (stripped), dms lb. .29½- .32
tanks lb. .27 - —
Cod oil, dms., spot lb. .08¾- .09
Codeine, NF, cns., 100-oz lots oz 13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate, USP cns., 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms. gal. 1.40 - 1.70
Cohosh root, black, bls. lb. .20 - .22
Blue, bls lb 20 .22
Colchicine, USP, bots oz. 27.00 - —
Colchicum root, bls lb. .30 - .35
Colchicum seed, bgs lb. .60 - .65
Collodion, USP, dms. lb .32½- —
Flexible, dms lb. .34 - —
Colocynth pulp, bls lb. .75 - —
Colombo root, bls lb. .16 - .18
Condurango bark, bls. lb. .26 - —
Congo copal gum, No. 1, bgs lb 25 - .26
No. 2 bgs lb 22 - .24
No. 3, bgs. lb. .16½- .19
Copaiba balsam, cns., dms lb. .65 - —
Copaiba oil, cns. lb. 1.35 - 2.00
Copper acetate, bbls., c.l., works. lb. .53 —
bbls., l.c.l., works lb. .54 —
Copper carbonate, 55%, bgs., c.l., works lb. .3405- —
bgs., l.c.l., works lb. .34560- —
Copper chloride, cupric, anhyd., dms., works lb. .44 - .44½
Cryst., dihydrate dms., works, lb. .30 - .30½
Cryst., dried, dms., works lb. .38¼- .38¾
Copper chloride, cuprous, dms., works lb. .39¼- .42¼
Copper cyanide, tech., dms., 20,000-lb lots or more lb. .609 - —
dms., 1,000-lb lots or more lb. .619 - —
dms., smaller lots lb. .639 - .659
Copper gluconate, dms. lb. 3.20 —
Copper hydrate dms., c.l., frt. alld. E. of Miss lb. .51¾- —
dms., l.c.l., same basis lo. .52¼- —
Copper metal, electrolytic, dlvd. Valley basis lb. .30 - —
opper naphthenate, liq., 8% Cu, dms., frt alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾- .32¾
Copper oleate, solid 9% Cu, dms., works lb. .45 —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .46¼- —
Copper oxide, red, 97%, USN Type I, bbls., 100-5,000-lb. lots lb. .47 - —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works, lb. .45 - —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 1.15
Copper resinate, precip, dms., frt. alld lb. .36½- —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works, 100 lbs. 11.95 - —
bgs., l.c.l., works 100 lbs. 11.95 -14.95
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs. 22.55 - —
dms., l.c.l., works 100 lbs. 23.30 - —
Copper sulfate, tribasic distributors, bgs., c.l., works 100 lbs. 27.35 - —
bgs., l.c.l., works 100 lbs. 28.35 -31.35
Copper sulfate solution, dms. lb. 2.75 —
Copra, Atl., Gulf ports ton. 210.00 - —
Pac. ports, c.i.f. lb. 205.00 - —
Coriander oil, USP, bots. lb 9.25 -11.50
Coriander seed, Moroccan, bgs lb. .08 - —
Rumanian, bgs. lb. .07½- —
Yugoslavian, bgs lb .08½ —
Corn oil, crude, tanks, works lb. .11½- —
roots (soapstock) New York lb. .06¾- —
Refd., salad, dms lb. .1723- .1750
tanks lb. .1523- —
Corn oil acids, dist., dms. lb. .16¾- .19¼
tanks lb. .14¼- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l 100 lbs. 7.45 - —
Corn syrup, 42° Be., non-ret. dms., c.l 100 lbs. 7.31 - —
non-ret. dms., l.c.l. 100 lbs. 7.46 —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, kilo or more gram. 1.30 - 1.75
Costus oil, bots. oz 6.00 —
Cottonseed meal, 41%, bgs., Memphis ton. 64.00 Nom.
Cottonseed oil, crude, tanks, South, East lb. .11⅞- —
tanks, Valley lb. .11¾- —
tanks Texas, Lubbock lb. .10¼ Nom.
tanks, Texas, Waco lb. .10⅝- —
Foots (soapstock), acid 95%, tanks, New York lb. .05¼- —
Refd., salad, dms. lb. .16⅝- .17
tanks lb. .14⅝- —
Cottonseed oil acids, dist., dms lb. .16¼- .19¼
tanks lb. .14¼- —
Coumarin, NF, cryst., dms. lb. 3.60 3.70
Cramp bark, NF, bls. lb. 85 - .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots. chys. lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
Crude, soln. 80%, tanks, works, gal. .226 - —
Creosote, coaltar, refd., dms., c.l., works gal. .50 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .38 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote oil (see Creosote coaltar).
Creosote, beechwood, chys., dms., f.o.b., works, dlvd in Metropolitan area lb. 1.72 1.77
Hardwood, NF, chys., dms., same basis lb. 1.42 1.47
Pinewood, dms., incl., c.l., works lb. .0561- —
dms. incl., l.c.l., works lb. .0634- —
dms. incl., l.c.l., ex whse, New York lb. .0745- —
tanks, works lb. .0460- —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
USP, non-ret. dms. c.l., same basis lb. .18 - —
non-ret. dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98% dms. c.l., works. lb .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
2.97% 2°C., dms., c.l., frt. equald, lb .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .20 - —
o-Cresol, 30.5°C. m.p. and over, ret. dms. c.l., frt equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
29°-29.9°C. m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25°-28.9°C. m.p., dms., c.l., frt. equald. lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .52 - —
dms., l.c.l., dlvd. lb. .53 - —
tanks, dlvd. lb. .49 - —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - —
dms., smaller lots, works lb. .72 - —
p-Cresyl methyl ether, cns. lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal 1.15 - —
Cresylic acid, coaltar, dom., meta-para content 25% or less, dms., c.l. t.l. same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt equald. gal. 1.00 - —
Cresylic acid, coaltar, imp., meta-para content, 25% or less, f.o.b. works, frt equald, to competitive points, 50 dms or more gal. 1.03½- —
less than 50 dms., same basis gal. 1.05 - 1.15
tanks, same basis gal. 1.00 - —
Crotonaldehyde, 93-93% dms., l.c.l., works lb. .25 - —
Crotonic acid, dms. 200 lbs. or more, l.c.l., works lb. .51 - —
Cryolite, nat., indust. bgs., c.l., works 100 lbs. 13.00 - —
bgs., l.c.l., works 100 lbs. 14.25 - —
Cube root powd., 5% rotenone, bgs., c.l. t.l., works lb. 25 - —
Cubeb berries, NF, bgs. lb. 1.00 - —
Powd., cs. lb. 1.15 - —
Cubeb oil, cns. lb. 12.00 -16.00
Cumene, dms. c.l., works lb. 12 - —
dms., l.c.l., works lb. .14 - —
tanks works lb. .11 - —
Cumin seed, Iranian, bgs lb. .30 - —
Moroccan, bgs. lb. .31 - —
Turkish, bgs. lb. .27 - —
Cumin seed oil, bots., cns. lb. 15.50 -17.00
Cyanamide fertilizer, mixing grade, 21% N gran. bgs., Niagara Falls Ont., contract ton. 57.00 - —
pulv., 21% N. bgs. works, unit-ton 2.85 - —
Cyanamide, indust. grade, bgs., c.l., works ton. 75.00 - —
bgs., l.c.l., works ton. 96.00 - —
indust. grade, 6-16 mesh, dms., c.l. works ton. 120.00 - —
dms. l.c.l., works ton. 140.00 - —
Cyclohexanone, 99%, tech., dms., c.l., dlvd E. of Rockies gal. 1.02 - —
dms., l.c.l., same basis gal. 1.10 - —
dms., c.l., dlvd. W. of Rockies gal. .77 - —
dms., l.c.l., same basis gal. .85 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms. c.l., works, frt. alld E lb. .28½- —
dms., l.c.l., works, same basis. lb. .29½- —
tanks, works, same basis lb. .26 - —
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
dms., l.c.l., works lb. .34½- —
tanks, works lb. .31 - —
Cyclohexylamine, dms., c.l., works. lb. .49 - —
dms., l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cyclopropane, CP, 2-lb. cyls., works, cyl. 48.00 - —
6-oz cyls., works cyl. 12.00 - —
Cyclopropane, USP, hospitals, cyls., 40-gal. lots gal. .42 - —
cyls., 100-gal lots gal. .41 - —
cyls., 200-gal. lots gal. .40 - —
Cypress oil, bots. lb. 5.30 - —

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2,4-D tech. bgs., dms., c.l., works, frt equald lb. .40 - —
bgs., dms., l.c.l., same basis lb. .45 - .49
2,4-D butyl ester, dms., c.l., works, lb. .43 - —
dms., l.c.l., same basis lb. .48 - .52
tanks, same basis lb. .42 - —
2,4-D isopropyl ester, dms., c.l., works lb. .43 - —
dms., l.c.l., works lb. .48 - .52
tanks, works lb. .42 - —
Dammar gum, Batavia A/E, cs lb. No stocks.
East India, Batu, bold, bgs. lb. .14¼- .16½
nubs and chips bgs. lb. .08½- .09½
black, bold bgs lb. .14½- .16½
nubs and chips, bgs lb. .12¼- .13½
unscraped, bgs. lb. .13 - .14½
pale, chips, bgs lb. .14½- .16
nubs and chips, bgs. lb. .09 - .10
Siam, cs. lb. .30 - .33
Singapore, No. 1, bgs lb. .36 - .41
No. 2, bgs lb. .29 - .32
No. 3, bgs lb. No stocks.
dust, bgs. lb. .17 - .19
Dandelion root, bls. lb. .28 - .32
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 - .47
fib. dms., l.c.l., works lb. .46 - .48
DDT, flake or lump, bgs., c.l., dlvd lb. .23 - —
bgs., smaller lots same basis. lb. .25 - —
fib. dms., c.l., same basis lb. .24 - —
fib. dms., smaller lots, same basis lb. .26 - —
Powdered DDT 1c. per pound higher.
1-Decanol, tech., dms., c.l., dlvd. E. lb. .43½- —
dms., l.c.l., dlvd. E lb. .45½- —
tanks, dlvd. E lb. .41 - —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½- —
dms., l.c.l., dlvd lb. .25 - —
tanks, dlvd lb. .21 - —
Perfume grade, bots lb. 1.75 2.00
Decyl alcohol, normal (see 1-Decanol)
Deertongue leaves, bls lb. .45 - —
Defluorinated phosphate feed grade, 13% P, paper bgs., c.l., t.l. works ton. 51.00 - —
18% P, paper bgs., c.l., works. ton. 63.50 -69.12
19% P, paper bgs. works, Houston, Tex., c.l., t.l ton. 71.50 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices
Degras, common, bbls lb. .10 - .12
Neutral, bbls lb. .21 .23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17 dms., c.l., dlvd E of Rockies gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80½
tanks, dlvd, same basis gal. .53½- —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division
Denatured alcohol, proprietary solvent, dms., c.l. dlvd. E of Rockies gal. .72 - —
dms., l.c.l., same basis gal. .77 .83
tanks, same basis gal. .56 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1 dms., dlvd E of Rockies gal. .70½- —
dms., l.c.l. same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD2B dms., c.l. dlvd E of Rockies gal. .69 - —
dms., l.c.l., same basis gal. .74 .80
tanks, same basis gal. .53 - —
SD3A dms. c.l. dlvd E of Rockies gal. .68 - —
dms., l.c.l., same basis gal. .73 .79
tanks, same basis gal. .52 - —
SD23A, dms. l.c.l. dlvd E of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 - —
dms., l.c.l., same basis gal. .76 .82
tanks, same basis gal. .55 - —
SD29 dms. c.l. dlvd. E. of Rockies gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80½
tanks, same basis gal. .53½- —
SD30, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., l.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —
SD-35A, dms., c.l., dlvd. E. of Rockies gal. .71 - —
dms., l.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 - —
SD-40, dms., c.l., dlvd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained
d-Desoxyephedrine hydrochloride, dms lb. 15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb 6.50 - —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.38 - —
paper bgs., l.c.l 100 lbs 9.53 - —
canary dark, paper bgs., c.l. 100 lbs. 9.22 - —
paper bgs., l.c.l 9.37 - —
indust. grade, 6-16 mesh., dms., canary light, paper bgs., c.l., 100 lbs. 9.12 - —
paper bgs., l.c.l 100 lbs 9.27 - —
white, paper bgs., c.l 100 lbs. 8.96 - —
paper bgs., l.c.l 100 lbs. 9.11 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs higher
Dextrose, anhyd., coml., bgs., c.l., ex whse 100 lbs. 8.50 - —
bgs., l.c.l., ex whse 100 lbs. 8.65 - —
Anhyd., special, al. foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 - —
100-lb dms 100 lbs. 15.20 - —
Hydrated, coml., bgs., c.l., ex whse. 100 lbs. 7.30 - —
bgs., l.c.l., ex whse 100 lbs. 7.45 - —
USP, dms. lb. 19¾- —
Diacetyl, flavor grade, bots lb. 4.30 4.55
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .13 - —
Diacetone alcohol, tech., dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .12½- —
Diallylamine, dms., c.l., dlvd lb. 98½- —
dms., l.c.l., dlvd lb. 1.00 - —
tanks, dlvd. lb. .96 - —
o-Dianisidine, dry, tech., fib. dms, lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .93 - —
dms., l.c.l. same basis lb. .94 - —
tanks, same basis lb. .91 - —
p-Dibromobenzene, bgs. 500-lb lots, lb. .55 - —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd lb. .65 - —
l.t.l., dms., same basis lb. .68 - —
Food grade, c.l., t.l., dms., dlvd, lb. .65 - —
l.t.l., dms., same basis lb. .68 - 1.10
2,6-Di-tert-butyl-p-cresol, tech., dms., c.l., t.l., dlvd. lb. .57 -
dms., l.c.l., same basis lb. .60 -
tanks, same basis lb. .54 -
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E lb. .33 - —
tanks, dlvd. E lb. .29 - —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E lb. .33 - —
tanks, dlvd. E lb. .29 - —
Dibutyl phthalate, dms. c.l., dvd. E. lb. .28½- —
dms., l.c.l., same basis lb. .30 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works lb. .68½- —
tanks, works lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld lb. .65½- —
Dibutylamine, dms. c.l., dlvd lb. .55½- —
dms., l.c.l., same basis lb. .57 - —
tanks, same basis lb. .53 - —
Dicapryl phthalate, dms., c.l., dlvd. lb. .28 - —
dms., l.c.l., dlvd lb. .29½- —
tanks, dlvd. lb. .24½- —

Dicapryl sebacate, dms., c.l., works. lb. .63 - —
dms., l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
Dichlorophenoxyacetic acid (see 2,4-D).
2,5-Dichloroaniline, dms., works lb. .83 - —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb. .73 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾- —
dms., l.c.l., same basis lb. .13¾- —
tanks, same basis lb. .11 - —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 - —
dms., 2,000 lbs. or more same basis, lb. .14½- —
1,4,-Dichlorobutane, dms., c.l. or t.l., works lb. .33½- —
dms., l.c.l., or l.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether dms., c.l., t.l., dlvd. E lb. .15½- —
dms., l.c.l., l.t.l., same basis lb. .17 - —
tanks, same basis lb. .13 - —
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dicyclohexylamine dms., c.l., works. lb. .54 - —
dms., l.c.l. works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, gran., fib. dms., c.l., works frt. alld. lb. .46½- —
fib. dms., l.c.l., same basis lb. .48 - —
Didecyl phthalate, dms. c.l. works. lb. .28½- —
dms., l.c.l., same basis lb. .30 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
tankcars, tanktrucks, 2,000 gals., lb. .26 - —
Dieldrin, dms. dlvd lb. 1.85 - —
dms., l.c.l., dlvd lb. 1.90 - —
Diethanolamine, dms., c.l., dlvd E. lb. .27 - —
dms., l.c.l., same basis lb. .28½- —
tanks, same basis lb. .24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., l.t.l., frt. alld lb. .28½- —
tanks, frt. alld lb. .26½- —
Diethyl barbituric acid (see Barbital).
Diethylbenzene dms. t.l. frt. alld. lb. .16½- —
dms., l.t.l., same basis lb. .18½- —
Diethyl carbonate, dms. c.l., f.o.b. works lb. .47½- —
dms., l.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½- —
dms., l.c.l., dlvd. lb. .71 - —
tanks, dlvd. lb. .67 - —
Diethyl oxalate, dms., c.l., f.o.b. works lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Diethyl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd lb. .29 - —
Diethyl phthalate, tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb. .26 - —
Diethyl sulfate, dms., c.l., works lb. .19½- —
dms., l.c.l., works lb. .20¼- —
tanks, works lb. .17½- —
Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works lb. 2.30 - —
5-44 dm lots, works lb. 2.35 - —
1-4 dm lots, works lb. 2.40 - —
Diethylamine, dms., c.l., dlvd. E lb. .52 - —
dms., l.c.l. same basis lb. .53½- —
tanks, same basis lb. .49½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate)
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd. E lb. .17¾- —
dms., l.c.l., same basis lb. .19¼- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, c.l. dms., works lb. .30¾- —
dms., l.c.l., works lb. .32¼- —
tanks, dlvd. E lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, dlvd. E lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., dlvd lb. .22½- —
dms., l.c.l., dlvd lb. .24 - —
tanks, dlvd. E lb. .20 - —
Diethylene glycol monoethyl ether acetate, dms., c.l., works lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., dlvd lb. .22½- —
tanks, dlvd. E lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E lb. .44 - —
dms., l.c.l., dlvd. E lb. .45½- —
tanks, dlvd. E lb. .41½- —
Diethylstilbestrol, USP, bots, 10-kilo lots kilo. 100.00 -147.50
bots., 1-kilo lot kilo. 110.00 -152.50
Digitalis leaves, USP, dom., dms lb. 1.20 - —
Digitoxin, USP, bots gram. 4.75 - —
Diglycol laurate, dms lb. .32¾- .34
Diglycol stearate, dms., ton lots lb. .26 - .28
Diglycolic acid, bgs., c.l., t.l., works. lb. .15½- —
bgs., l.c.l., works lb. .16 - —
Dihexyl sebacate, dms., c.l., works. lb. .66 - —
dms., l.c.l., works lb. .67 - —
tanks, works lb. .64 - —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .037 - .038
Dihydrostreptomycin sulfate, bulk. gram. .037 - .038
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
tech., dms. lb. 1.09 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18½- —
tanks, dlvd. lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd. E lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E lb. .10 - —
dms., l.c.l., dlvd. E lb. .11½- —
tanks, dlvd E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanktrucks, 1,000-1,999 gals lb. .25½- —
tankcars, tanktrucks, 2,000 gals., lb. .25 - —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 - —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48 - —
Dillweed oil, dom., bots., dms lb. 3.10 - 4.10
Dimethyl anthranilate, cns. lb. 4.35 - —
Dimethyl ethanolamines, anhyd., dms. c.l., dlvd lb. 1.225 - —
dms., l.c.l., dlvd. lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms. c.l., dlvd., 100% basis, contained amines lb. .68½- —
dms., l.c.l., dlvd., 100% basis. lb. .69½- —
tanks, dlvd. 100% basis lb. .66 - —
Dimethyl hydroquinone, dms. lb. 1.90 - 2.20
Dimethyl phthalate, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 - —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 - —
dms., l.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .16½- —
dms., l.c.l., works lb. .17 - —
tanks, works lb. .15 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis. lb. .38 - —
dms., l.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis. lb. .28 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, frt. equald, 100% basis. lb. .28 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .30 - —
dms., l.c.l. frt. alld. lb. .31 - —
tanks, frt. alld. lb. .28 - —
N,N-Dimethylformamide, dms., works. lb. .34 - .39
tanks, works lb. .32 - —
2,4-Dinitroaniline, dms., frt. alld lb. .75 - —
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies lb. 1.56 - —
Dinitroaniline orange toner prices 1c. higher W of Rockies.
m-Dinitrobenzene, 85°C., dms. lb. .22 - —
89° C., dms. lb. .24 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .15¼- —
dms., l.c.l., frt. alld. E. lb. .15¾- —
tanks, frt. alld. E. lb. .15 - —
2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. alld. E lb. .20¼- —
dms., l.c.l., frt. alld. E. lb. .20¾- —
tanks, frt. alld. E. lb. .20 - —
2,4-Dinitrophenol, bbls. lb. .37 - —
2,4-Dinitrotoluene, oily dms. lb. .11 - —
Refd., 63°C., dms. lb. .23 - —
Dioctyl adipate, dms., c.l., works. lb. .42½- —
dms., l.c.l. works lb. .43½- —
tanks, works lb. .40 - —
Dioctyl phthalate, dms., c.l., frt. alld lb. .27½- —
dms., l.c.l., frt. alld lb. .29 - —
Dioctyl phthalate, tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
tanks, works, dlvd. lb. .59¼- —
1,4-Dioxane, dms. c.l. works lb. .30 —
dms., l.c.l. works lb. .30¾- —
tanks, works lb. .28 - —
Dipentaerythritol, c.l., t.l., dlvd. E. lb. .40 - —
bgs., l.c.l., l.t.l., dlvd. E lb. .41 - —
Dipentene, dest.-dist., dms., c.l., works gal. .59 - —
dms., l.c.l., works gal. .63 - —
dms., l.c.l., ex whse. gal. .79 - —
tankcars, works gal. .42 - —
Dipentene, steam dist., dms., c.l., works, South gal. .72 - —
dms., l.c.l., dlvd. New York gal. .91 - —
tanks, works, South gal. .55 - —
Dip oil (see Tar acid oil)

MONTROSE
CHEMICAL COMPANY

100 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Isophthalate

Trimethyl Borate — Trimethoxy Boroxine

T.C.P. — Tricresyl Phosphate

Mono Cresyl Diphenyl Phosphate

D.D.T. — Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28% — 40%

D.E.T. — Diethyl Toluamide
(95% Meta Isomer)

D.D.V.P. — Dimethyl Dichloro Vinyl Phosphate
(Minimum 95% Purity)

EXCLUSIVE SALES AGENTS

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

Diphenyl—Ethyl Alcohol

Diphenyl, bgs., c.l., t.l., works	lb.	.17¼	- —
bgs., l.c.l., works	lb.	.19	- —
tanks, works	lb.	.16	- —
Diphenyl oxide, perfume grade, cns.	lb.	.65	- .85
Diphenyl phthalate, dms., c.l., works.	lb.	.51¾	- —
dms. l.c.l. works	lb.	.53¾	- —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald	lb.	.31	- —
bgs., l.c.l., same basis	lb.	.33	- —
Diphenylamine, refd., fused, tanks, same basis	lb.	.28	- —
Refd. diphenylamine in dms ½c. per lb higher			
Diphenylguanidine, bgs., dms., ton lots, frt. alld	lb.	.49	- —
bgs. smaller lots, frt alld.	lb.	.50	- —
Diphenylhydantoin-sodium, USP dms.	lb.	5.00	5.60
Dipropylene glycol, dms., c.l., frt. alld	lb.	.17¾	- —
dms., l.c.l., frt. alld	lb.	.19¼	- —
tanks, frt. alld	lb.	.15¼	- —
Dipropylene glycol methyl ether, dms., c.l., dlvd E	lb.	.20	- —
dms., l.c.l., same basis	lb.	.21½	- —
tanks, same basis	lb.	.18½	- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works	lb.	1.45	- —
Di-o-tolylguanidine, dms., ton lots, frt alld	lb.	.69	- —
dms., smaller lots, frt alld.	lb.	.70	- —

Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld	lb.	.88	- —
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald	lb.	.20	- —
dms., l.c.l., same basis	lb.	.21	- —
tanks, same basis	lb.	.19	- —
50-60%, dms., c.l., works, 100% basis	lb.	1.00	- —
dms., l.c.l., works, 100% basis	lb.	1.05	- —
Dodecylbenzene, dms., c.l., f.o.b., works, frt. equald	lb.	.134	- —
dms., l.c.l., same basis	lb.	.144	- —
tanks, same basis	lb.	.114	- —
Dodecylphenol, c.l., frt. alld.	lb.	.22	- —
dms., l.c.l., same basis	lb.	.23	- —
tanks, same basis	lb.	.19½	- —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.			

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:

Blue, FD&C, No. 1	lb.	15.65	-17.60
No. 2	lb.	15.65	-17.60
Green, FD&C, No 1	lb.	15.65	-17.60
No. 2	lb.	19.60	-22.85
No. 3	lb.	31.30	-35.90
Red, FD&C, No. 1, cns.	lb	5.90	7.85
No. 2	lb	3.30	4.10
No. 3	lb.	19.60	-22.85
No. 4	lb	5.55	7.50
Violet, FD&C, No. 1, cns.	lb.	15.65	-17.60
Yellow, FD&C, No. 1, cns.	lb	9.15	-11.05
No. 5	lb.	3.30	4.10
No. 6	lb.	3.30	4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—

Black, D&C, No. 1	lb.	10.50	-10.95
Brown, D&C, No. 1	lb.	15.65	-16.10
Green, D&C, No. 5	lb.	15.65	-16.10
No. 6	lb.	15.65	-16.10
No. 7	lb.	14.35	-14.80
Orange, D&C, No. 3	lb.	10.50	-10.95
No. 4	lb.	19.60	-20.05
No. 5	lb.	3.80	- 4.25
Red, D&C, No. 17	lb.	10.50	-10.95
No. 18	lb.	23.60	-24.00
No. 19	lb.	15.00	-15.45
No. 21	lb.	3.90	4.35
No. 22	lb.	10.50	-10.95
No. 28	lb.	24.15	-24.65
No. 33	lb.	17.00	-17.45
Violet, D&C, No. 2	lb.	15.65	-16.10
Yellow, D&C, No. 7	lb.	10.50	-10.95
No. 8	lb.	10.50	-10.95
No. 10	lb.	13.05	-13.50
No. 11	lb.	13.05	-13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots divd:—

Blue, Ext., D&C, No. 1, cns.	lb.	15.65	-16.10
Green, Ext., D&C, No. 1, cns.	lb.	15.65	-16.10
Red, Ext., D&C, No. 1, cns	lb.	13.05	-13.50
Yellow, Ext., D&C, No. 1, cns	lb.	10.50	-10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale or prototype), contract, dlvd. No.

11110	Brilliant scarlet BN	lb.	1.70	- —
13390	Fast blue SR	lb.	1.30	- —
14025	Yellow 2G	lb.	1.18	- —
14030	Orange R, extra, conc.	lb.	1.52	- —
14645	Chrome black T	lb.	.73	- —
14720	Rubine XX, conc.	lb.	1.47	- —
15510	Orange Y, extra conc.	lb.	.79	- —
15575	Orange RR	lb.	.94	- —
15620	Fast Red A, conc.	lb.	1.53	- —
15705	Chrome blue black R, conc.	lb.	1.07	- —
16150	Scarlet 2RL	lb.	1.16	- —
16230	Fast light, orange 2G	lb.	1.39	- —
16255	Brilliant scarlet 3RN, conc.	lb.	1.20	- —
17590	Brown PG	lb.	3.00	- —
18050	Phloxine 2G	lb.	1.05	- —
18055	Fuchsine 6B	lb.	1.55	- —
18965	Fast Yellow 2G	lb.	2.32	- —
19140	Yellow XX	lb.	2.30	- —
19355	Yellow NN, conc.	lb.	3.67	- —
20170	Brown Y	lb.	1.27	- —
20470	Blue black, extra, conc.	lb.	1.37	- —
21010	Brown, RX, conc.	lb.	1.35	- —
22240	Scarlet B	lb.	2.60	- —
22310	Red FC	lb.	1.45	- —
22311	Brown MCW	lb.	1.40	- —
22590	Diazo black BHD	lb.	.93	- —
22610	Blue 2B, extra conc.	lb.	1.53	- —
23500	Red, 4BX, conc	lb.	1.80	- —
24410	Sky blue FF, extra, conc.	lb.	1.95	- —
24895	Brilliant yellow conc.	lb.	3.11	- —
26400	Navy blue 3R, conc.	lb.	1.70	- —
26695	Black F, conc.	lb.	2.19	- —
26900	Milling Red 3R, conc.	lb.	1.91	- —
27075	Neutral black 2B, conc.	lb.	2.75	- —
27720	Gray L	lb.	2.03	- —
29185	Fast scarlet 4BNC	lb.	2.12	- —
30015	Diazo black VJ conc.	lb.	2.48	- —
30235	Black EB, 200%	lb.	1.33	- —
30045	Yellow brown K, extra	lb.	1.26	- —
30295	Green BY, conc.	lb.	1.02	- —
35660	Brown B	lb.	2.89	- —
37565	Naphthol SWF	lb.	1.76	- —
40000	Yellow 2G	lb.	1.31	- —
41000	Yellow OX	lb.	2.45	- —
42000	Green V, crystals	lb.	2.73	- —
42040	Brilliant green G crystals	lb.	3.62	- —
42090	Blue EG	lb.	1.85	- —
42100	Milling green 6B, conc.	lb.	4.78	- —
42640	Violet 4BXN	lb.	2.25	- —
43820	Brilliant blue BBG	lb.	2.44	- —
44045	Blue B, extra conc.	lb.	3.61	- —
45170	Red BX	lb.	4.76	- —
50415	Nigrosine SSJ	lb.	1.03	- —
52015	Blue GXX	lb.	2.22	- —
53185	Black, GXCF, conc.	lb.	.38	- —
58005	Alizarin red SC	lb.	3.31	- —
59700	Golden orange GFD, single paste	lb.	2.70	- —
59710	Flaming orange 6RD double powder	lb.	4.90	- —
59800	Dark blue BO, single paste	lb.	2.28	- —
59825	Jade green NC supra, double paste	lb.	1.56	- —
61570	Alizarin green CG extra	lb.	3.53	- —
63010	Alizarin blue SAPG	lb.	3.78	- —
63615	Alizarin blue black B	lb.	3.02	- —
69625	Blue BLFD double paste	lb.	2.82	- —
70800	Brown BR single paste	lb.	2.03	- —

Dyes, coaltar, oil-soluble, 100-lb. drums dlvd. No.

12140	Oil scarlet BL	lb.	1.70	- —
12055	Oil orange 7078-V	lb.	5.87	- —
26120	Oil red N-1700	lb.	1.76	- —
42535B	Methyl violet base	lb.	1.88	- —
44045B	Victoria blue base	lb.	4.06	- —
50415B	Oil black 8603	lb.	.80	- —
61565	Alizarin cyanine green base,	lb.	6.13	- —

Dyes, coaltar, spirit soluble, 100-lb. drums, dlvd No.

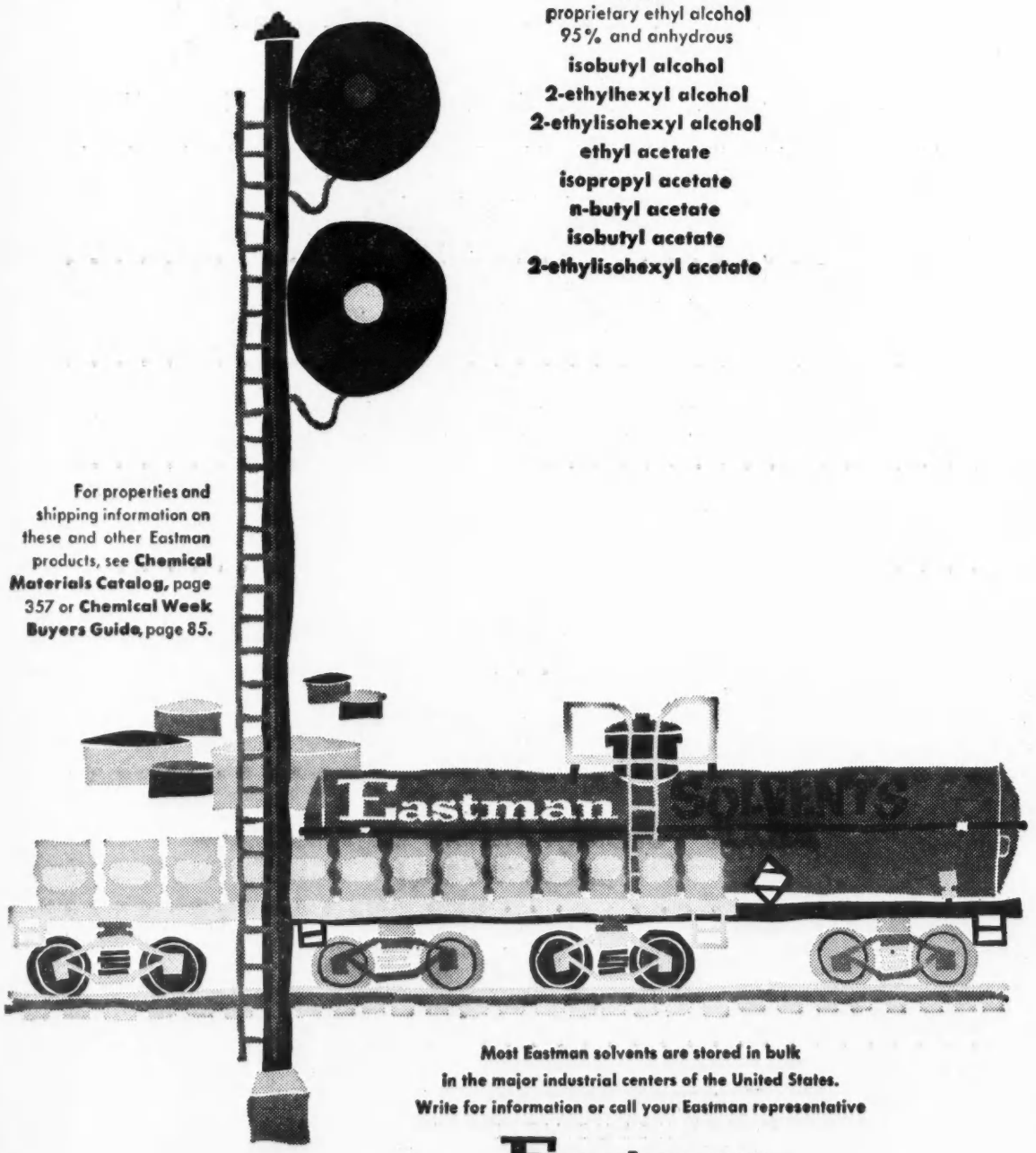
	Spirit black RB	lb.	3.88	- —
	Spirit brown GN	lb.	5.30	- —
	Spirit orange R conc.	lb.	5.87	- —
	Spirit red B conc	lb.	6.41	- —
	Spirit yellow 2R conc.	lb.	4.62	- —
12055	Spirit orange 7078-V	lb.	1.25	- —
	Spirit blue THN	lb.	5.06	- —

E

Echinacea root, bls	lb.	1.10	- —
Elm bark, grinding, bls.	lb.	.30	- .32
Powd., bbls., bxs.	lb.	.45	- —
Select, bundles	lb.	.75	- —
Emetine hydrochloride, USP, bots.	oz.	48.40	- —
Endrin, tech., dms., t.l., dlvd	lb.	3.35	- —
Eosin red toner, bbls., works	lb.	1.85	- —
Ephedrine, syn., USP, anhyd., bots. 100-oz. lots	oz.	.98	- 1.00
hydrous bots. 100-oz. lots	oz.	.92	- —
Ephedrine hydrochloride, NF, dms.,	oz.	.60	- .65
Ephedrine sulfate, USP, cryst., dms.,	oz.	.60	- .80
Powd., dms.	oz.	.60	- .80
Epichlorohydrin, dms., c.l., dlvd	lb.	.32½	- —
dms., l.c.l., dlvd	lb.	.34	- —
tanks, dlvd.	lb.	.30	- —
Epsom salt (see Magnesium sulfate).			
1-Epinephrine base, syn., USP, bots., 100 gram lots	gram	.58	- —
Erigeron oil, cns.	lb.	11.00	- —
Ergot, NF, dms., tin-lined	lb.	1.50	- —
Eserine salicylate, bots	oz.	54.75	- —
Eserine sulfate, bots	oz.	86.00	- —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va.	lb.	.17	- —
Ester gum, wood-rosin type, dms., c.l., same basis	lb.	.17	- —
Ether (see specific product).			
Ethyl acetate, nat., ferment, 85-88%, dms., c.l., dlvd	lb.	.15	- —
dms., l.c.l., dlvd	lb.	.16½	- —
tanks, dlvd.	lb.	.12½	- —
95-98%, dms., c.l., dlvd	lb.	.15¼	- —
dms., c.l., dlvd	lb.	.15¼	- —
dms., l.c.l., dlvd	lb.	.16¾	- —
tanks, dlvd.	lb.	.12¾	- —
99%, dms., c.l., dlvd.	lb.	.15½	- —
dms., l.c.l., dlvd	lb.	.17	- —
tanks, dlvd.	lb.	.13	- —
Syn., 85-88%, dms., c.l., dlvd	lb.	.15	- —
dms., l.c.l., dlvd	lb.	.16½	- —
tanks, dlvd	lb.	.12½	- —
95-98%, dms., c.l., dlvd	lb.	.15¼	- —
dms., l.c.l., dlvd	lb.	.16¾	- —
tanks, dlvd.	lb.	.12¾	- —
99%, dms., c.l., dlvd.	lb.	.15½	- —
dms., l.c.l., dlvd	lb.	.17	- —
tanks, dlvd.	lb.	.13	- —
Ethyl acetoacetate, dms., c.l., dlvd.	lb.	.58½	- —
dms., l.c.l., dlvd.	lb.	.60	- —
tanks, dlvd.	lb.	.56	- —
Ethyl acrylate, dms., c.l., t.l., dlvd.	lb.	.36	- —
dms., t.t.l., dlvd.	lb.	.37	- —
tanks, dlvd.	lb.	.34	- —
Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd. E. of Rockies	gal.	20.63	- —
dms., l.c.l., same basis	gal.	20.68	-20.74
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies	gal.	.68	- —
dms., l.c.l., same basis	gal.	.73	- .79
tanks, same basis	gal.	.52	- —
Ethyl alcohol, absolute, 200 pf., tax paid, dms., dlvd. E. of Rockies	gal.	21.75	- —
dms., l.c.l., same basis	gal.	21.80	-21.86
tanks, same basis	gal.	21.59	- —

Eastman Solvents

acetone
ethyl alcohol
Tecsol®
proprietary ethyl alcohol
95% and anhydrous
isobutyl alcohol
2-ethylhexyl alcohol
2-ethylisohexyl alcohol
ethyl acetate
isopropyl acetate
n-butyl acetate
isobutyl acetate
2-ethylisohexyl acetate



For properties and shipping information on these and other Eastman products, see **Chemical Materials Catalog**, page 357 or **Chemical Week Buyers Guide**, page 85.

Most Eastman solvents are stored in bulk in the major industrial centers of the United States. Write for information or call your Eastman representative

Eastman
CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Chicago; Cincinnati; Cleveland; Framingham, Massachusetts; Greensboro, N. C.; Houston; New York City; St. Louis. **West Coast: Wilson Meyer Co.**, San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Ethyl alcohol, denatured (see Denatured alcohol, ethyl).
Ethyl aminobenzoate, USP (see Benzocaine).
Ethyl amyl ketone, dms., c.l., dlvd. lb. .20 - —
dms., l.c.l., same basis lb. .21½- —
tanks, same basis lb. .17½- —
Ethyl benzoate, bots. lb. .90 - —
Ethyl bromide, tech., 98%, dms., c.l., frt. alld.E lb. .43 - —
dms., l.c.l., frt. alld. E lb. .45 - —
tanks, frt. alld. E. lb. .41 - —
2-Ethyl butyl alcohol, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., t.t.l., works lb. .36¾- —
tanks, works lb. .34 - —
Ethyl butyrate, works lb. .90 - 1.00
Ethyl carbamate (see Urethane).
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .73 - —
bgs., smaller lots, frt. alld. E lb. .75 - —
Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E. lb. .68 - —
bgs., smaller lots, frt. alld. E. lb. .70 - —
Ethyl chloride, tech., cyls., works. lb. .20 - .22
dms., works lb. .18 - .20
tanks, works lb. .10 - —
Ethyl cinnamate, cns. lb. 3.35 - 3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd. E lb. .43½- —
dms., l.c.l., dlvd. E lb. .44½- —
tanks, dlvd. E. lb. .41½- —
Ethyl ether, absolute, ACS, dms lb. .27 - —
Ethyl ether, anesthesia, USP, dealers, 1-lb. cns. lb. 1.01 - —
½-lb. cns. lb. 1.09 - —
¼-lb. cns. lb. 1.21 - —
Ethyl ether, indust., dms., c.l., dlvd. lb. .13½- —
dms., l.c.l., dlvd E lb. .15 - —
tanks, dlvd. E. lb. .11 - —
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E lb. .37 - —
dms., l.c.l., t.t.l., dlvd. E. lb. .38½- —
tanks, dlvd F lb. 34½- —
2-Ethyl hexoic acid, 1c. higher W. of Rockies.
2-Ethylhexyl acrylate, c.l. or t.l., straight or mixed frt. alld. E lb. .42½- —
dms., t.t.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
2-Ethylhexyl alcohol, dms c.l., dlvd. lb. .23¾- —
dms., l.c.l., dlvd. lb. .25¼- —
tanks, dlvd. lb. .21¼- —
Ethyl iodide, cbys., works lb. 3.30 - —
Ethyl methacrylate, dms., c.l., frt. equald lb. .52 - —
dms., t.t.l. frt. equald. lb. .52½- —
tanks, frt. equald lb. .50 - —
Ethyl morphine hydrochloride, USP, bots oz. 11.85 - —
N-Ethyl-a-naphthylamine,
Ethyl oenanthate, dms. lb. 1.20 - 1.50
Ethyl oxalate (see Diethyl oxalate)
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available, SiO_2, dms., c.l., dlvd lb. .44½- —
dms., l.c.l. dlvd. lb. .46 - —
tanks, dlvd. lb. .42 - —
N-Ethyl-a-naphthylamine, dms., works. lb. 1.02 - —
N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —
N-Ethyl-o-toluidide, bbls. lb. .88 - —
Ethylamine (see Mono-, Di-, or Tri-).
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., l.c.l., frt. alld. lb. .58 - —
tanks, frt. alld. lb. .55 - —
Ethylbenzene 99% dms., c.l. or t.l., frt. equald lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½- —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
Ethylene, contract, refy. gate lb. .0473- .0525
Ethylene dibromide, dms., c.l., frt. equald lb. .30½- —
dms., l.c.l. frt. equald. lb. .31½- —
tanks, frt. equald lb. .28½- —
Ethylene dichloride, dms., c.l., dlvd. lb. .11½- —
dms., l.c.l., same basis lb. .13 - —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Ethylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 - —
dms., l.c.l., dlvd. E lb. .23½- —
tanks, dlvd E. lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E. lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½- —
dms., l.c.l., dlvd. E. lb. .20½- —
tanks, dlvd., E. lb. .17 - —
Ethylene glycol monomethyl ether, dms., c.l. dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd., E. lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., dlvd. E lb. .28 - —
dms., l.c.l., dlvd. E. lb. .29¾- —
tanks, dlvd. E. lb. .27 - —
Ethylene glycol monostearate, triple pressed, dms. lb. .33 - .35
Ethylene oxide, dms. c.l., dlvd. E. lb. .21½- —
dms., l.c.l., dlvd. E. lb. .24½- —
tanks, dlvd. E. lb. .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms., l.c.l., dlvd. E., 100% basis. lb. .43 - —
tanks, dlvd. E., 100% basis lb. .40 - —
Ethylvanillin, 100-lb. fib. dms., 500-lb. lots and over lb. 6.73 - —
Eucalyptol, USP, cns., dms. lb. .90 - 1.40
Eucalyptus oil, NF, rectified, 70-75%, dms. lb. .43 - .70
NF, rectified, 80-85%, dms. lb. .53 - .80
Eugenol, USP, dms lb. 2.25 - 3.00
Tech., dms. lb. 1.45 - —
Euphorbia herb, bls lb. .12 - .15

F

F salt, paste, tech., dms., works lb. 2.30 - —
Feldspar, 140-200 mesh, bulk, c.l., works ton. 19.50 - —
Feldspar in bags $3 per ton. higher
Fennel oil, sweet, USP, cns lb. 2.60 - 3.00
Fennel seed, Argentine, bgs. lb. .14 - —
French, light, bgs lb. .20 - —
Indian, light, bgs lb. .20 - —
Rumanian, bgs. lb. .14 - —
Yugoslav, light, bgs lb. .16½- —
Fenugreek seed, Moroccan, bgs. lb. .07½- —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms. l.c.l., works 100 lbs. 8.50 - —
Indust., cryst., bois., c.l., works. 100 lbs. 5.23 - 6.75
bbls., l.c.l., works 100 lbs. 5.73 - 7.23
Ferric chloride, 42° Be., photo grade, cbys., c.l., works 100 lbs. 7.23 - 8.23
sewage grade, tanks, frt. equald. 100% basis 100 lbs. 4.00 - —
USP, cryst., dms., t.l., works lb. .08½- —
Ferric citrate, gran., dms. lb. .86 - —
Ferric hypophosphite, NF, dms lb. 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. .89 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble gran. pearls, cs lb. .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms. lb. .79 - —
Ferric resinate, 6¾% Fe., dms., ton. lots, frt. alld lb. .36½- —
Ferric stearate, dms., c.l., frt. alld. lb. .39 - —
dms., l.c.l., frt. alld. lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l. works ton. 35.25 - —
bgs., l.c.l., works ton. 36.25 - 42.25
bulk, c.l., works ton. 33.25 - —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .63 - .68
Green, pearls, USP XII, gran., dms lb. .66 - .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb. .32½- .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .98 - —
Ferrous sulfate, gran., bgs., c.l., works ton. 34.50 - —
bgs., l.c.l., dlvd. Metropolitan area, 100 lbs 3.25 - 4.25
bbls., c.l., works ton. 40.00 - —
bulk, c.l., works ton. 27.00 - —
USP, cryst., bbls., dms. lb. .09½- .10
Fir balsam, Canada, bbls. gal. 32.00 - 35.00
Oregon, bbls. gal. 3.75 - 4.00
Fir oil, Canada, cns lb. 1.90 - 3.00
Fish oil, refd., alkali, dms lb. .1250- .1300
Kettle-bodied, dms lb. .1180- .1530
Light-pressed, dms lb. .1100- .1150
tanks lb. .0950- —
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units. .16 - —
200,000 A units per gram, dms. 1,000,000 units. .17½- —
500,000 A units per gram, dms., 1,000,000 units. .18 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic coast ton. 123.00 - —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic coast ton. 121.00 - —
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo or more gram. .44 - —
10% feed grade, fib. dms., 3 kilos or more kilo. 44.00 - —
Formaldehyde, 37%, (inhibited 7 to 8% methanol), USP, dms, c.l., dlvd lb. .0670- —
tanks, dlvd. lb. .0405- —
Formaldehyde, 37%, (inhibited 12 to 15% methanol), USP, dms., c.l., dlvd lb. .0695- —
tanks, dlvd. lb. .0430- —
Formaldehyde, methanol-free (uninhibited), tanks, dlvd lb. .0375- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls lb. .70 - —
Fuller's earth, bgs., c.l., Ill. mines. ton. 19.00 - —
Fuller's earth, calcined, bgs., c.l., same basis ton. 20.00 - 21.75
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines ton. 17.50 - —
Oil-bleaching, grade, 100-mesh, bgs., c.l., same basis ton. 16.30 - 17.00
200-mesh, bgs., c.l., same basis. ton. 17.50 - 18.00
Spent, bgs., c.l., ship't. point ton. 4.50 - 5.00
Fumaric acid, tech., 250-lb. dm., c.l., frt. alld lb. .27¼- —
dms., l.c.l., same basis lb. .28¼- —
Prices of fumaric acid 1½c. per lb. higher west of Denver.

VULCAN STEEL PAILS

The manufacturer needing a small package for his requirements can choose exactly the right size and type from the complete Vulcan line of steel pails. Vulcan offers a choice of gauges in both lug cover and closed head types in sizes ranging from one to fifteen gallons.

VULCAN STEEL DRUMS

These drums are the choice of leading manufacturers for the shipment and storage of liquids, plastics, crystals, semi-solids, and powders. All standard drum gauges are available . . . check with us regarding closures and accessories.

CHECK WITH VULCAN ON THESE TOO!

GREASE DRUMS . . . Available in both 120 and 100 pound capacities.

15 GALLON DRUMS . . . A new addition to the Vulcan line—available in open head and closed head types.

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VULCAN CONTAINERS INC., Bellwood, Illinois
Gentlemen: I am interested in: OPD-89
☐ Pails, in the following sizes _____
☐ Hi-Bake protective linings for (product) _____
☐ 55 gallon drums.
Please get this information to
Name _____
Company _____
Address _____
City _____ Zone ____ State _____

Furfural—1-Hexanol

Furfural, dms., c.l., works	lb.	.13	- —
dms., l.c.l., works	lb.	.14	- —
tanks, dlvd E.	lb.	.12	- —
tanks, dlvd W	lb.	.13	- —
Furfuryl alcohol, dms., c.l., Memphis, Tenn	lb.	.20	- —
dms., l.c.l., Memphis, Tenn.	lb	21	- —
tanks, Memphis, Tenn	lb	184	- —
Furfuryl alcohol dms. c.l. Newark, N J	lb.	21½	- —
dms. l.c.l. Newark N J	lb	22½	- —
Fusel oil refd. dms., c.l., dlvd	lb	18	- —
dms., l.c.l., dlvd	lb	19½	- —
tanks dlvd.	lb	15½	- —

G

G salt bbls. frt alld., 100% basis	lb	73	- —
Gallic acid NF VII, bbls. 1,000-lb lots	lb	2.00	—
bbls., smaller lots	lb	2.02	2.22
Gallic acid, tech., bbls., 1,000-lb lots	lb	1.78	—
bbls. smaller lots	lb	1.80	2.00
Gamma acid, dry grd., bbls., frt alld	lb	1.75	—
Paste bbls. frt. alld	lb	1.70	- —
Gammapicoline (see g-picoline).			
Garlic oil, dom. bots	oz	4.75	6.05
Imp. bots	oz	4.50	5.00
Gaultheria oil (see Wintergreen oil).			
Gelatin, edible, pure pork skin, 75 AOAC test, bbls., c.l.	lb.	.53	- —
150 AOAC test, bbls., c.l.	lb.	.62	- —
200 AOAC test, bbls, c.l.	lb.	.68	- —
225 AOAC test, bbls. c.l.	lb.	.70	- —
275 AOAC test, bbls., c.l.	lb.	.78	- —
Gelsemium root, bls.	lb.	.26	- —
Gentian root, bls.	lb.	.24	- —
Grd., bbls., bxs	lb.	.30	- —
Powd., bbls., bxs	lb.	.30	- —
Geraniol, extra, cns., dms	lb.	2.00	- 3.65
Soap grade, dms	lb.	1.15	- 1.95
Standard, cns., dms.	lb	2.00	- 3.40
Geranium oil, Algerian, cns	lb.	20.50	-24.00
Bourbon, cns.	lb.	25.00	-29.50
Geranium oil, Turkish (see Palmarosa oil)			
Geranyl acetate, cns	lb.	1.90	- 2.70
Ginger oil, dist., bots	lb.	10.50	-14.00
Ginger oleoresin, NF from African root, bots	lb	5.00	5.60
NF, from Jamaican root, bots.	lb	8.75	-10.25
Ginger root, Cochin, bgs	lb.	.16	- —
Jamaican, No. 3, bgs	lb.	.32	- —
Nigerian, split, bgs	lb.	.13	- —
Sierra Leone, bgs	lb.	.19	- —
Glauber's salt (see Sodium sulfate).			
Gluconic acid, tech., 50%, dms., c.l., t.l., frt. alld	lb.	.18	- —
dms. l.c.l., frt alld.	lb.	.20½	- —
tanks, frt. alld.	lb.	.13½	- —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs c.l., dlvd.	lb.	.15	- —
Glue, bone, extracted, dry bone, 131 jellygrams, bgs., c.l., same basis	lb.	.17	- —
164 jellygrams, bgs., c.l., same basis	lb.	.17½	- —
191 jellygrams, bgs., c.l., same basis	lb.	.19	- —
222 jellygrams, bgs., c.l., same basis	lb.	.22	- —
40 jellygrams, bgs., c.l., same basis	lb.	.16	- —
65 jellygrams, bgs., c.l., same basis	lb.	.16	- —
86 jellygrams, bgs., c.l., same basis	lb.	.16	- —
115 jellygrams, bgs., c.l., same basis	lb.	.16½	- —
135 jellygrams, bgs., c.l., same basis	lb.	.17½	- —
164 jellygrams, bgs., c.l., same basis	lb.	.18½	- —
180 jellygrams, bgs., c.l., same basis	lb.	.19½	- —
200 jellygrams, bgs., c.l., same basis	lb.	.20½	- —
Bone glue, l.c.l., prices 2c. higher.			
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd	lb.	.17	- —
95-121, bgs., c.l., dlvd	lb.	.18	- —
122-149, bgs., c.l., dlvd	lb.	.19½	- —
150-177, bgs., c.l., dlvd	lb.	.21	- —
178-206, bgs., c.l., dlvd	lb.	.24½	- —
207-236, bgs., c.l., dlvd	lb.	.27	- —
237-266, bgs., c.l., dlvd	lb.	.28	- —
267-298, bgs., c.l., dlvd	lb.	.31	- —
299-330, bgs., c.l., dlvd	lb.	.32	- —
331-362, bgs., c.l., dlvd	lb.	.35	- —
363-394, bgs., c.l., dlvd	lb.	.36	- —
395-427, bgs., c.l., dlvd	lb.	.39	- —
428-460, bgs., c.l., dlvd	lb.	.41	- —
Glue, hide, 461-494, bgs., c.l., dlvd.	lb.	.42	- —
495-529, bgs., c.l., dlvd	lb.	.45	- —
Hide glue, l.c.l., prices 2c higher.			
l-Glutamic acid, 99½%, fib. dms., 100-lb lots, frt. alld	lb.	1.80	- —
fib. dms., 25-lb. lots, frt. alld.	lb.	1.88	- —
l-Glutamine, bots., 1-9 kilo lots,	kilo.	150.00	-300.00
50-kilo lots	kilo.	100.00	- —
500-kilo lots	kilo.	75.00	- —
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd	lb.	.20½	- .21
nat., crude, soaplye, 80%, tanks, dlvd	lb.	.18½	- .19
Glycerine, imp., nat., crude, soaplye, 80%, c.i.f.	lb.	.19	- .20¼
Glycerine, nat., refd., USP CP, 99%, dms., c.l., dlvd	lb.	.29⅜	- —
dms., l.c.l., dlvd	lb.	.29⅞	- —
tanks, dlvd.	lb.	.27⅝	- —
96%, dms., c.l., dlvd.	lb.	.28½	- —
dms., l.c.l., dlvd	lb.	.29	- —
tanks, dlvd.	lb.	.26¾	- —
high gravity, dms., c.l., dlvd	lb.	.29¼	- —
dms., l.c.l., dlvd.	lb.	.29¾	- —
tanks, dlvd	lb.	.27½	- —
Syn., dms., c.l., dlvd.	lb.	.29½	- —
dms., l.c.l., dlvd.	lb.	.30	- —
tanks, dlvd.	lb.	.27¼	- —
Glycine (see Aminoacetic acid).			
Glycerol (see Glycerine).			
Glycolic acid (see Hydroxyacetic acid).			
Glyoxal, 30%, dms., c.l., works	lb.	.20½	- —
dms., l.c.l., works	lb.	.21¼	- —
tanks, works	lb.	.18	- —
Golden seal root, NF, tested, bls.	lb.	3.25	- —
Gramicidin, 1 to 5 kilos, f.o.b. works.	gram.	4.70	- —
Grapefruit oil, dms.	lb.	2.00	- 2.75
Graphite, amorp, powd., bgs., fib. dms., ex whse	lb.	.06	- .09⅛
cryst., 88-90%, powd., bgs., fib. dms ex whse	lb.	.19	- .21⅛
Graphite, amorph., cryst., 90-92%, ex whse.	lb.	.21	- .24⅛
powd., bgs., fib dms., ex whse	lb.	.29	- .31⅛
Graphite, flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29	- .31
No. 2, 90-95%, bgs., fib. dms., ex whse	lb.	.29	- .31
Grease, white, choice all hog, tanks, dlvd	lb.	.06½	- .06¾
Yellow, tanks, dlvd.	lb.	.05⅝	- .05¾
Grease oil, No. 1, dms., c.l.	lb.	.14¾	Nom.
dms., l.c.l.	lb.	.15¾	Nom.
Extra winter, strained, dms., c.l.,	lb.	.18¼	Nom.
dms., l.c.l.	lb.	.18¾	Nom.
Prime, burning, dms., c.l.	lb.	.19¾	Nom.
dms., l.c.l.	lb.		

Green Pigments

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb bls	lb	45	—
Guaiacol, NF, cryst., dms., tips	lb	2.10	- 2.15
NF, liq., chys., dms	lb	2.30	- 2.40
Guaiacol carbonate NF VII, dms.	lb	3.40	3.45
Guaiacwood oil, cns	lb.	.75	- 1.30
Guar gum, food grade, bgs., c.l.	lb.	.38	- —
bgs., 5,000 lbs. or more	lb.	.39	- —
Indust., bgs., c.l.	lb.	.32	- —
Tech. grade, bgs.	lb.	.30	- .33

Gums

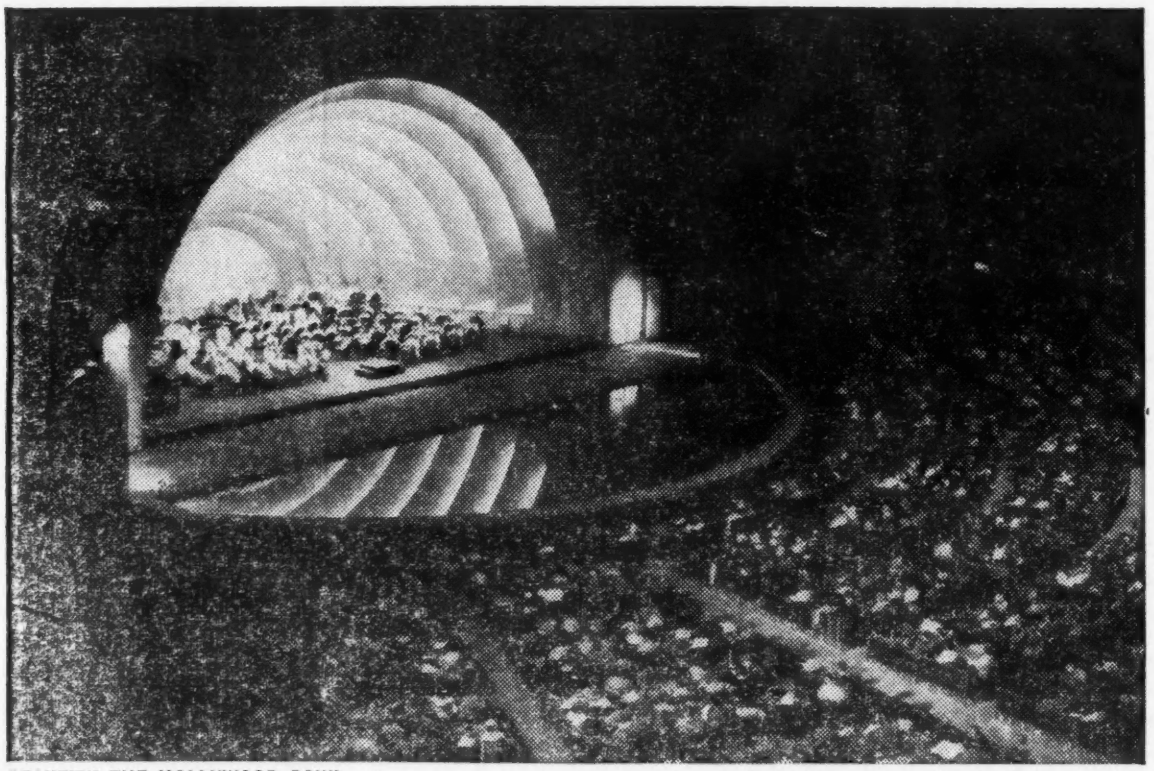
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York	ton.	20.30	- —
Terra alba, dom., 100 lb. paper bgs., trucks, same basis	ton.	20.00	- —
100-lb. paper bgs., trucks, works New York	ton	17.00	- —
imp., l.c.l., English, 100-lb. paper bgs., ex dock, New York.	ton.	55.00	- —
100-lb paper bgs. ex whse:	ton.	60.00	-62.00

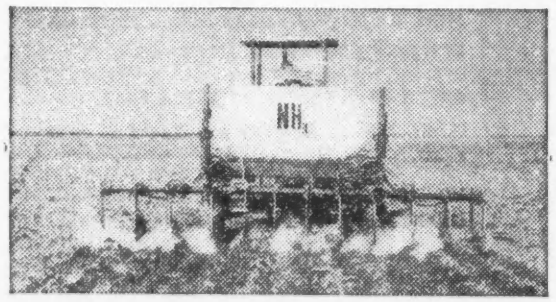
H

H acid, dry, bbls., c.l., frt. alld., 100% basis	lb.	.90	- —
bbls., l.c.l. same basis	lb.	.95	- —
Hansa yellow 10 G, bbls., dlvd. E. of Rockies	lb	2.45	- —
Hansa G yellow, pigment, bbls	lb.	2.20	- —
Hawthorn berries, bgs.	lb.	.18	- .20
Heliotropin 100-lb lots dms.	lb.	2.50	- 3.00
Hellebore root dom. green bls	lb.	.70	- .75
Helonias root, bls.	lb.	1.50	- —
Hemlock oil, cns.	lb.	2.55	- 3.00
Henbane leaves, bls.	lb.	.30	- .35
Heptachlor, dms., c.l., t.l., 100% basis, frt. alld	lb.	.96	- —
Heptane, indust., tanks, Bayonne, N. J	gal.	.20	- —
tanks, Baytown, Tex.	gal.	.16¼	- —
tanks, Borger, Tex.	gal.	.16¼	- —
tanks, Houston Tex.	gal.	.16¼	- —
Hesperidin, purif., 100-lb. fib. dms., f.o.b. works	lb	8.95	- —
Hesperidin methylchalcone, bots., 50-lb lots, works	lb.	22.50	- —
bots., 5-lb lots, works	lb.	23.00	- —
bots., 1-lb lots, works	lb.	23.50	- —
Hexachlorophene, dms	lb.	1.94	- —
Hexalin (see Cyclohexanol)			
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York	lb.	.233	- —
bgs., 1,000-19,999-lb. lots, same basis	lb.	.243	- —
bgs., smaller lots same basis.	lb.	.253	- —
fib. dms., 1,000-lb. lots or more, same basis	lb.	.250	- —
fib. dms., smaller lots, same basis	lb.	.253	- —
USP bgs., 500 lbs or more, f.o.b. Fords, N. J., dlvd. New York and Philadelphia	lb.	.42½	- —
bgs., smaller lots, same basis	lb.	.43½	-.48¼
Hexane, indust., tanks, Bayonne, N. J	gal.	.20	- —
tanks, Borger, Tex., dlvd	gal.	.16	- —
tanks, Houston, Tex.	gal.	.16	- —
1-Hexanol, dms., c.l., works	lb.	.35	- —
dms., l.c.l. works	lb.	.35¾	- —
tanks, works	lb.	.33	- —

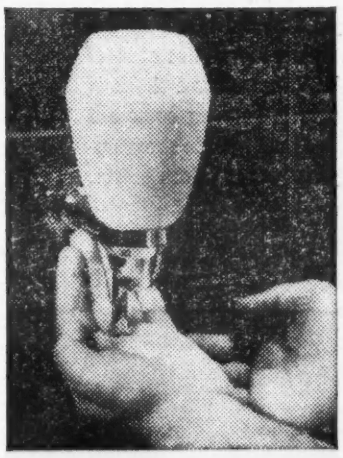
HOW HERCULES HELPS...



BEAUTIFY THE HOLLYWOOD BOWL—This crescent-shaped pool, reflecting the concrete-arch acoustical shell, doubles in brass as an orchestra pit, or is covered to add to the stage itself. Its surface is protected against such severe three-way usage by Nelsonite Pool Coating, based on Parlon® chlorinated rubber. Well over half of all the nation's swimming pools are likewise protected with Parlon-based paints, for durability, weatherability, chemical and alkali resistance, and a smooth waterproof finish. Other Parlon-based coatings protect everything from waterworks to chemical plants, gondola cars to tugs and ships; and preserve the good looks of concrete and stucco homes and buildings. Consult your regular source of coatings.



FEED HUNGRY SOIL—Anhydrous ammonia, produced by Hercules plants in three important agricultural areas, replenishes nitrogen-deficient soils. Literally "injected" into the ground, the ammonic nitrogen combines almost instantly with soil particles. Applications can be made nearly any time of the year when temperature and moisture conditions are suitable.



SERVE SOAP IN STYLE—Bobrick's new line of soap dispensers features an unbreakable plastic globe made with Hi-fax® high-density polyethylene. Hi-fax is now being used in blown containers of many types, offering handsome styling durability and resistance to chemical corrosion in a low-cost, easily-processed plastic material.

HERCULES POWDER COMPANY
INCORPORATED
900 Market Street, Wilmington 99, Delaware

G59-2

CHEMICAL MATERIALS FOR INDUSTRY

HERCULES

Hexyl cinnamic aldehyde, dms. lb. 4.00 - 7.50
a-Hexyl methacrylate, dms., c.l., works lb. .73¼- —
dms., l.c.l., works lb. .76 - —
Hexyl salicylate, dms. lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., l.c.l., dlvd lb. .19 - —
tanks, dlvd. lb. .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd lb. 14.00 - —
dms., smaller lots, dlvd. lb. 14.50 - —
Homatropine hydrobromide, USP, bots oz. 3.50 - —
Homatropine methylbromide, USP, bots oz. 3.25 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.75 - —
Horehound herb, bls. lb. .16 - .19
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85% ret. dms., works lb. 1.35 - 1.55
100% ret. dms., works lb. 1.60 - 1.90
Hydriodic acid, 1.50 s.g., cbys. lb. 2.92 - —
1.70 s.g. cbys. lb. 3.23 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1 lb. .29¼- —
dms., l.c.l., dlvd. zone 1 lb. .29¾- .30¼
tanks, dlvd. zone 1 lb. .27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys., frt. equald lb. .48 - .56
Hydrochloric acid, anhyd. (see Hydrogen chloride)
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton. 28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
cbys., l.c.l., dlvd. Metropolitan area 100-lbs. 3.15 - —
tanks, works frt. equald ton. 30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.65 - —
tanks works frt. equald ton. 35.00 - —
CP, USP, consumers cbys., extra, c.l., works lb. .15¾ - —
cbys., l.c.l., same basis lb. .17¼- .17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis lb. .20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram. 1.30 - 1.75
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram. 1.30 - 1.75
Hydrocyanic acid, dilute, NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs. 19.25 - —
55-gal. dms., t.c.l., t.t.l., dlvd. 100 lbs. 20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs. 21.00 - —
20-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs. 22.50 - —
tanks, works, frt. equald. 100 lbs. 15.50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb. cyls. l.c.l., works lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 96%, tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½- .32½
cyls. dlvd. W. lb. .39 - —
tanks, works lb. .21 - —
Hydrogen peroxide 35%, dms., c.l., dlvd lb. .202 - —
dms., l.c.l., dlvd. lb. .211 - —
tanks, dlvd. lb. .1800- —
Hydroquinone, photo grade, dms. lb. 1.10 - 1.13
Tech., dms., c.l., dlvd. lb. .82½- —
dms., l.c.l., dlvd. lb. .84½- —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle, W. Va. lb. .073 - —
Hydroxycitronellal, cns. lb. 4.20 - 5.10
Hydroxyethyl cellulose, low viscosity grades, 20,000-lb. lots or more, f.o.b. shipping point lb. .96 - —
2,000 to 19,999-lb. lots, same basis lb. .99 - —
150 to 1,999-lb. lots, same basis. lb. 1.02 - —
Less than 150-lb. lots, same basis lb. 1.12 - —
Hydroxyethyl cellulose, high viscosity grades, 20,000-lb. lots or more, more, f.o.b. shipping point lb. 1.01 - —
2,000 to 19,999-lb. lots, same basis lb. 1.04 - —
Hydroxyethyl cellulose, 85 to 1,999-lb. lots, same basis lb. 1.07 - —
Less than 85-lb lots, same basis.
Hyoscine salts (see Scopolamine) lb. 1.17 - —
Hyoscyamine hydrobromide, bots oz. 7.00 - —
Hyoscyamine sulfate, bots. oz. 7.00 - —
Hypophosphorous acid, purif. 50% cbys., ton lots, f.o.b. works lb. .83 - —
NF, 30%, cbys., all quantities, same basis lb. .75 - —

I

Ichthammol, NF, dms. lb. .75 - 1.05
Indigo (see Dyes coaltar, 1171 indigo, syn).
Indole, CP, bots lb. 15.75 -18.25
Inositol, bots., dlvd. lb. 5.00 - —
dms., dlvd. lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb. .95 - —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms., kgs. lb. 4.90 - 5.00
a-Ionone, cns. lb. 3.85 - 5.00
b-Ionone, cns. lb. 3.85 - 5.85
Ipecac root, whole, bgs lb. 8.00 - 8.50
Powd., bbls. bxs. lb. 9.50 -10.00
Irish moss, bleached, prime, bls. lb. .22 - .25
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 - —
bbls. l.c.l., ton lots, same basis. lb. .58 - —
bbls., smaller lots, same basis. lb. .59 - —
Iron blue, dom., reg., bbls., c.l., dlvd. E lb. .52 - —
bbls., l.c.l., ton lots, same basis lb. .53 - —
bbls., l.c.l., smaller lots, same basis lb. .54 - —
Imp., British, reg., bbls., c.l., dlvd. E lb. .48 - —
bbls., l.c.l., ton lots, same basis lb. .49 - —
bbls., l.c.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon., Wyo., Utah, Col. and Nev.

Iron compounds (see Ferric or Ferrous)
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red, bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y. lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l., works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock lb. .06 Nom.
bbls., l.c.l., ex whse. New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type, bgs., l.c.l. lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade, bgs., c.l., works lb. .12¼- —
Other shades, same basis lb. .12 - —
Isoamyl alcohol, dms., c.l., works, frt. alld. E lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Isoborneol, cns. lb. 1.44 - 1.80
Isobornyl acetate, cns. lb. .48 - .56
Isobornyl formate, dms. lb. 1.20 - —
Isobornyl proprionate, dms. lb. 1.23 - 1.35
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd. lb. .16½- —
dms., l.c.l., dlvd lb. .18 - —
tanks, dlvd. lb. .14 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., dlvd. lb. .28½- —
Isobutyraldehyde, tech., dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .19½- —
Isoeugenol, cns. lb. 3.50 - 4.30
Isoniazid, powd., kilo or more kilo. 18.00 - —
Isonicotinic acid, 100-lb. fib dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E lb. .25 - —
tanks, dlvd. E. lb. .21 - —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .152 - —
dms., l.c.l., same basis lb. .162 - —
Isopropanol (see Isopropyl alcohol).
Isophorone, dms., c.l., works lb. .24½- —
dms., l.c.l., works lb. .25¼- —
tanks, works. lb. .22½- —
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms, l.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd gal. .68 - —
tanks, dlvd. lb. .42 - —
Refd., 95%, c.l., dms., dlvd. gal. .60 - —
dms., l.c.l., dlvd gal. .70 - —
tanks dlvd gal. .44 - —
Refd., anhyd., c.l., dlvd. gal. .62 - —
dms., l.c.l., dlvd gal. .72 - —
tanks, dlvd. gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb. .09½- —
dms., l.c.l., dlvd lb. .11 - —
tanks, dlvd. lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), tech., dms., c.l., t.l., works lb. 1.00 - —
dms., l.c.l., works lb. 1.05 - 1.25
tanks, works. lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 - —
450-lb. fib. dms., l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 - 1.25
Itaconic acid, refd., bgs., c.l., f.o.b. works lb. .53½- —
bgs., l.c.l., same basis lb. .54½- —
Tech., 250-lb. dms., c.l., same basis. lb. .39 - —
dms., l.c.l., same basis lb. .40 - —

COPPER

Copper Sulfate Industrial Crystals and all common grades.

Monohydrated Copper Sulfate 35% Copper as metallic packaged in steel drums at no extra cost.

Copper Carbonate 55% Copper as metallic. Light and dense grades.

Cupric Chloride 37% Copper as metallic. Available in polyethylene lined drums or bags.

SULFUR

Sulfuric Acid All grades and strengths from 60° Baume through the various Oleums.

Liquid Sulfur Dioxide Highest commercial quality, available in tank cars, tank wagons, ton cylinders and 150-lb. cylinders.

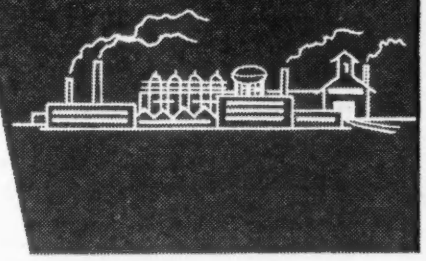
Sodium Hydrosulfite T-C HYDRO is a dry, white, free flowing crystalline powder of uniform particle size and structure. It is dust free, assuring highest stability and uniformity.

Chlorosulfonic Acid Iron less than 1.0 ppm as loaded. Water White. Delivered in glass-lined tank wagons, also in stainless steel drums.

Para Toluene Sulfonic Acid, Anhydrous Other organic Sulfonic Acids.

TC TENNESSEE CORPORATION

INDUSTRIAL CHEMICALS



We mine Copper, Iron, Zinc and Sulfur and are basic producers of their chemical derivatives. Our technical know-how in these basic materials is your assurance of exacting quality control and strict uniform consistency.

IRON

Ferric Iron Sulfate Partially hydrated free flowing granular. Available in bags or bulk.

ZINC

Monohydrated Zinc Sulfate 36% Zinc as metallic. White, free flowing powder.

Zinc Oxide Secondary.

MANGANESE

Manganese Sulfate 65% $MnSO_4$.

Monohydrated Manganese Sulfate 93% Mn, SO_4, H_2O. Highest purity, technical grade . . . NOT A BY-PRODUCT.

Manganous Oxide Minimum 48% Manganese as metallic. Feeds; fertilizers, spray or dust grades.

For Further Information or Samples, Make Request on Your Firm's Letterhead.

TC TENNESSEE CORPORATION

TENNESSEE CORPORATION
617-29 Grant Building, Atlanta, Georgia

J

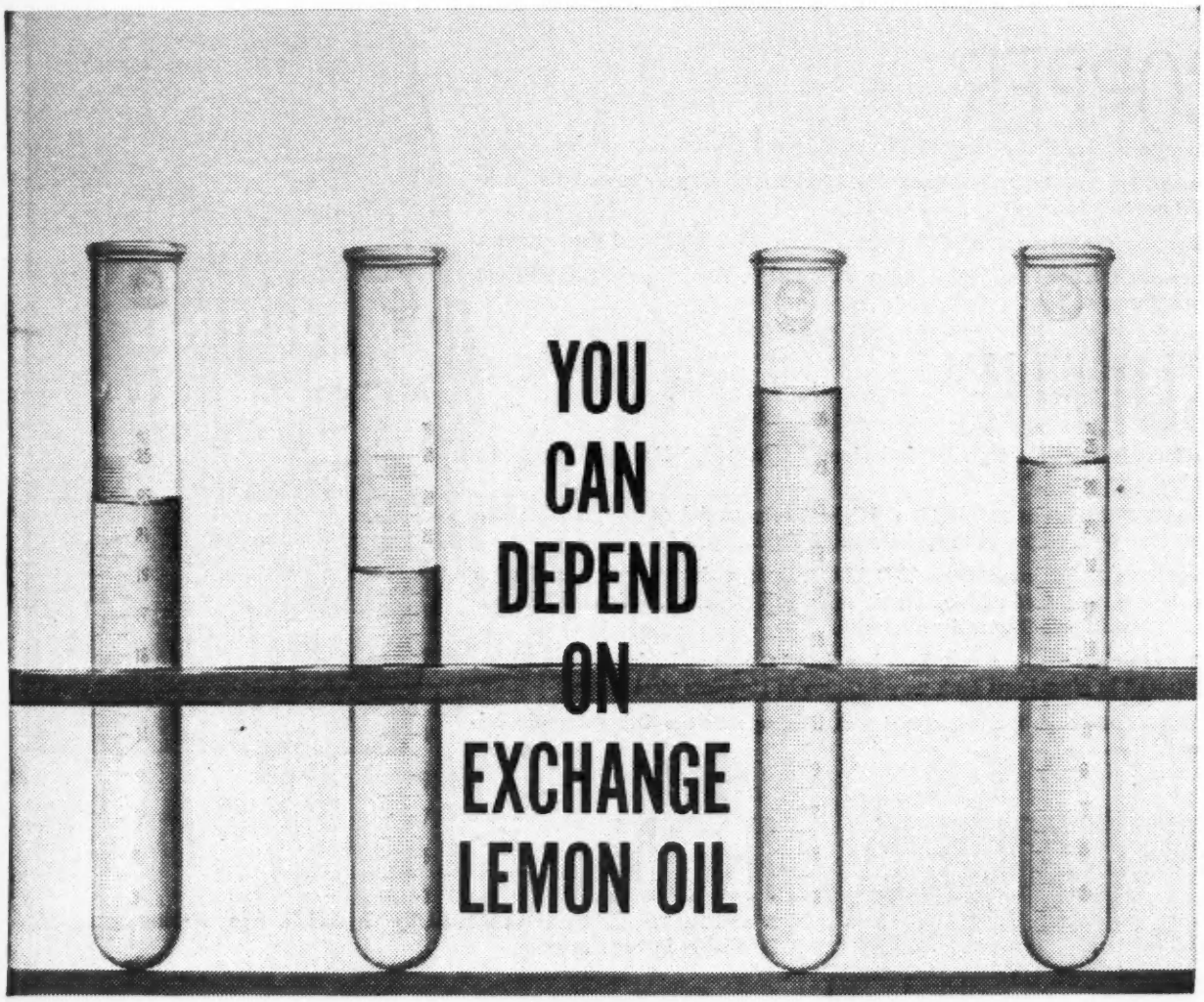
J acid, paste, bbls., works, 100% basis lb. 2.70 - —
Powd., bbls., same basis lb. 2.75 - —
Jalap root, NF, bls. lb. .90 - —
NF, powd., bbls., bxs. lb. 1.15 - —
Japan wax, cs lb. .27 - .29
Juniper berries, bgs. lb. .15 - —
Juniper berry oil, bots. lb 2.90 - 3.75
Twice rectified bots. lb 3.60 - 7.00
Juniper tar oil, NF dms lb. .42 - .60
Juniper wood oil, tech. cns. lb. .38 - .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib dms. lb. .10 - .12
NF, colloidal, 50-lb. bgs. lb. .15½- .17½
Karaya gum No. 1, NF, powd. bls. lb. .45 - .48
No. 2, powd., bbls lb. .40 - .42
No. 3, powd., bbls lb. .35 - .37
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .10 - —

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 150°-240° F b.r., tanks, west coast, ex tax, Los Angeles gal. .174 - —
Lacquer diluent, petroleum, 150°-240°F. b.r., tanks, east coast, N.J., N.Y. gal. .20 - —
Lacquer diluent, benzene type, tanks, group 3 gal. .1550- —
Toluene type, tanks, group 3 gal. .14375- —
tanks, Houston, Tex. gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1789- .2740
bbls., dms., 20 or more, frt. equald lb. .1839- .2790
bbls., dms., 5 to 19, frt. equald. lb. .1889- .2840
bbls., dms., 1 to 4, frt. equald. lb. .1938- .2890
80%, bbls., c.l., dms. frt. equald lb. .3039- .4625
bbls., dms., 20 or more, frt. equald lb. .3089- .4675
bbls. dms. 5 to 19 frt. equald. lb. .3139- .4725
bbls., dms., 1 to 4 frt. equald. lb. .3189- .4775
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls., 20 or more, works lb. .2790- —
bbls., 5 to 19, works lb. .2840- —
bbls., 1 to 4, works lb. .2890- —
80%, bbls., c.l., works lb. .4625- —
bbls., 5 to 19, works lb. 4725- —
bbls., 1 to 4, works lb. 4775- —
Tech., 22%, bbls., c.l., works. 100 lbs. 6.80 - —
bbls., l.c.l., works 100 lbs. 7.20 - —
Lactic acid, tech., 44%, bbls., c.l., works 100 lbs. 11.45 -12.70
bbls., l.c.l., works 100 lbs. 11.85 -13.10
USP, 85%, cbys. lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb. lots, frt. equald lb. .14½- —
bgs., 2,000-lb. lots, frt. equald lb. .14¾- —
bgs., 200-lb. lots, frt. equald lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, ferment. grade, bgs., c.l., works lb. .08½- —
USP, fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald lb. .22¼- —
fib. dms., 200-1,800-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c. to 1c. lower.
Lactose, USP, spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., l.t.l., frt. equald lb. .19 - .19¾
Lady's slipper root, bls. lb. 3.50 3.75
Lake C red toner, alizarine, bbls., works lb. 1.25 - —
Lamp black, bgs., c.l., works lb. .16 - .45
Lanolin, cosmetic, dms., works lb. .27 - .29
USP, anhyd., dms., works lb. .24 - .26
hydrous, dms., works lb. .23 - .25
Lard, cash, dms. lb. .08 - —
Lard oil (see Grease oil).
Larkspur seed, bgs. lb. .55 - —
Laurel leaf oil, dms., cns. lb 9.75 -12.50
Laurent's acid, bbls. lb. .60 - —
Lauric acid, pure, dms. lb. .38½- .41
tanks lb. .36 - —
Lauryl alcohol, bots. lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l. works lb. .65½- —
dms., l.t.l., works lb. .66 - —
Lavandin oil, 22-24%, dms. lb. 1.25 2.00
Abrial, dms. lb. 1.00 - 1.50
Lavender flowers, medium, bls lb. .55 - .60
Ord., bls. lb. .20 - .25
Select., bls. lb. .90 - 1.00
Lavender flower oil, USP, French, 35-37% ester, cns. lb. 2.75 - 6.75
40-42% ester, cns. lb. 5.00 - 7.75
Spike, Spanish, cns. lb. 2.20 - 3.00
Lead acetate, NF, cryst., gran., powd lb. .34½- —
White, cryst., bbls. lb. .25½- —
gran., bbls. lb. .26½- —
powd., bbls. lb. .26½- —
Lead arsenate, acid powder, dealers, 3-50 lb. bgs or any quantity, frt. alld, on $150 or more lb. .30½- —
1-lb. bgs., same basis lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld. lb. .17 - —
bbls., l.c.l., same basis lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, dms. lb. .52 - —
Lead iodide NF V jars lb. 3.82 - —
Lead linoleate, fused, 26% Pb dms. lb. .38 - —
Lead metal, prime, pigs, New York. lb. .12 - —
St. Louis lb. .1180- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .143 - —
bgs., l.c.l., same basis lb. .153 - —
Lead naphthenate, liq., 16% Pb, dms., dlvd lb. .19½- —
24% Pb, dms., dlvd. lb. .24¼- —
Solid, 37% Pb, dms., dlvd. lb. .31¾- —
Lead nitrate, bbls. lb. .24¼- .26¾
Lead orthosilicate-gel, 50-60% PbO, dms., works lb. .29¾ .34¼
Lead peroxide, tech. powd. bbls lb. .45 - .50
Lead phthalate, dibasic, dms., works. lb. .41 - —
Lead, red., 95% Pb_3O_4, nr less bbls., c.l., works, frt. equald lb. .14¼- —
bbls., l.c.l., same basis lb. .15¼- —
97% Pb_3O_4, bbls., c.l., same basis. lb. .1445- —
bbls., l.c.l., same basis lb. .1545- —
98% Pb_3O_4, bbls., c.l., same basis. lb. .1460- —
bbls., l.c.l., same basis lb. .1560- —
Lead resinate precip. 23% Pb, dms., ton lots, dlvd lb. .40¼- —
Lead salicylate, normal, dms., works. lb .46 - —
Lead silicate (see Lead white basic silicate).
Lead silico-chromate, bgs., c.l., f.o.b. mfg. point, frt. alld lb. .19½- —
bgs., l.c.l., same basis lb. .20½- —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb, dms lb. .15 - —
24% Pb, dms. lb. .21¼- —
Solid, 30% Pb, dms. lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs., l.c.l., same basis lb. .18 - —
Lead, white, basic silicate, bgs., c.l., shipt. pt. frt. alld lb. .15¾- —
bgs., l.c.l., same basis lb. .16¾- —
Lead, white, baste sulfate, bgs., c.l., shipt. pt., frt. alld lb. .16¼- —
bgs., l.c.l., same basis lb. .17¼- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms., l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, fib. dms., 25-lb lots, works lb 9.00 - —
Lemon oil, USP, Calif., cns., dms. lb. 3.10 - 3.50
Messina, cns. lb. 3.75 - 5.00
Lemongrass oil, cns. dms. lb. .95 - 1.25
dl-Leucine, dms. works lb. 12.25 -15.00
Licorice root, gran., bls. lb. .13 - —
Powd., bls. lb. .15 - .16
Whole, bls. lb. .09 - .10
Lignaloe wood oil, Mexican, cns lb 2.75 - 3.50
Lignosulfonate (see under ammonium or sodium lignin sulfonate)
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 - —
Chemical, spray, bgs., c.l., same basis ton. 18.25 - —
For New York delivery, add $6.29 freight charge.
Lime oil, dist., Mexican, cns. lb. 6.25 - 6.75
West Indian, cns. lb 6.50 - 7.80
Expressed, West Indian, cns. lb. 7.75 - 8.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb. 2.90 - 3.60
Syn., 98-100%, dms., works lb. 3.20 - 3.60
Linalyl acetate, ex bois de rose, 90-92%, dms. lb. 3.05 - 3.60
96-98%, dms. lb. 3.60 - —
Syn., 98-100%, dms., works lb. 3.40 - —
Lindane, 25% formulation to distributors dms., frt. alld lb. 1.35 - 1.50
Lindane, tech., to formulators, dms., 1-2,000 lbs., dlvd lb. 2.40 - —
Linden flowers, with leaves, bls lb. .25 - —
Without leaves, bls. lb. .35 - .40
Linseed meal, expeller 32% bulk. Minneapolis, mills ton. 70.50 - —
Extracted, 34% bulk, same basis. ton. 64.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1600- —
dms., l.c.l., New York lb. .17 - .1750
tanks, f.o.b. Minneapolis lb. .1250- —
tanks, New York lb. .1400- —
tankwagon, New York lb. .1450- .1460
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acids, dist., dms lb. .1900- —
Water-white, dms lb. .2200- —
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .13¾- —
bbls., l.c.l., same basis lb. .14¾- —
Lithium aluminum hydride, lump, dms., works lb. 33.00 -39.00
Lithium benzoate, dms. lb. 1.65 - 1.67
Lithium bromide, NF, gran., works, frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½- —
dms., ton lots to t.l., dlvd lb. 1.30 - 1.30¼
Tech., dms., c.l., t.l., frt alld lb. .67 - —
dms., ton lots, same basis lb. .73 - —
dms., smaller lots, same basis. lb. .79 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld lb. .87 - —
dms., l.c.l., same basis lb. .88 - .92
Lithium citrate, NF, dms., ton lots. lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb 2.15 - —
bbls., ton lots and more, dlvd. lb 2.18½- —
bbls., less ton lots, dlvd. lb. 2.23½- —
Lithium hydride, powd., dms., 500-lb. lots or more, works lb. 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .72 - —
dms., l.c.l., frt. alld. lb. .73 - —
Lithium manganite, dms., works lb. .95 1.05
Lithium nitrate, tech., dms., 100-lb. lots lb 1.15 1.25
Lithium salicylate, dms. lb 1.60 1.70
Lithium silicate, dms., works lb. 1.10 1.20



always pure
absolutely uniform
authentic U.S.P. oil

WHEN JUST AN OUNCE OR TWO of lemon oil can glorify – or ruin – a hundred-pound batch of your product, why gamble?

Use only Exchange Brand Lemon Oil, U.S.P., California Cold-pressed.

Made exclusively from their own California and Arizona lemons by the Sunkist Growers – the people who know citrus best – Exchange Lemon Oil is carefully cold-pressed, skillfully bulk-blended for matchless uniformity.

Sunkist Growers pack and seal every container – from the 7-pound tin to the 395-pound drum – in their own plant, and guarantee every drop to be pure U.S.P. quality oil – unadulterated, unsophisticated. Always look for the word "Exchange" on the tamper-proof container seal.

Exchange

Sunkist Growers

PRODUCTS SALES DEPARTMENT • ONTARIO, CALIFORNIA

Distributed in the U.S. by: Dodge & Olcott, Inc., 180 Varick Street, New York 14, N.Y. / Fritzsche Brothers, Inc., 76 Ninth Avenue, New York 11, N.Y. / Ungerer & Company, 161 Avenue of the Americas, New York 13, N.Y.

Lithium stearate, dms., c.l., works, lb. .47½- —
dms., ton lots, works lb. .48½- —
dms., less-ton lots, works lb. .53½- —
Lithium sulfate, dms., 100-lb. lots, lb. 1.15 - 1.25
Lithium titanate, dms., works lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. .98 - —
Lithol-rubine red toner, pure bbls., works lb. 1.50 - —
Resinated, bbls., works lb. 1.47 - —
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08⅜- —
bgs., l.c.l., dlvd. E. lb. .09⅛- —
Lithopone, titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs., l.c.l., dlvd. lb. .12 - —
Lobelia herb bls lb. .55 - —
Lobeline sulfate, bots., 50-oz. lots, works oz.30.00 - —
Locust bean gum, powd., bgs. lb. .38 - .40
Lycopodium, cs. lb. 4.00 - —
l-Lysine monohydrochloride, 25-lb. dms. lb. 4.95 - —

M

Mace, Siauw, No. 1, bls. lb. 2.20 - —
No. 2, whole, bls. lb. 1.65 - —
siftings, bls. lb. 1.60 - —
Mace oil, dist., cns., dms. lb. 9.75 -12.25
Magnesia, calcined, tech. bgs., ctns., frt. equald lb. .25¾ - .26½
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb. .28¾ - .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs., l.c.l., frt. equald lb. .28¾ - —
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Luning, Nev ton.39.50 - —
91%, bgs., c.l., same basis, ton.49.50 - —
93%, bgs., c.l., same basis, ton.59.00 - —
Magnesia, calcined, USP light bgs. lb. .36½- .37½
heavy, fib dms lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton.86.25 - —
Magnesite, chemical grade, dead-burnt, standard grain, bulk, c.l., Chawelah, Wash ton.46.00 - —
Magnesium bromide, cs., jars lb. .95 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt. equald lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13½- —
bgs., t.l., frt. equald lb. .14 - —
bgs., l.c.l., frt equald lb. .15 - .16
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92% flake or pebble, dms., c.l., works lb. .12¾- —
dms., t.c.l., works lb. .14 - .15
Magnesium chloride, hydrous, 99% flake, bgs., c.l., works ton.55.00 - —
bgs., t.c.l., works ton.65.00 -80.00
Magnesium gluconate, 100-lb. dm., f.o.b. works E lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b., works lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., l.t.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb. .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs. works frt. alld. on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb. .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs., l.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs, l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs, smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 - —
fib. dms., 1,000-lb. lots lb. .40 - —
fib. dms., 100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisicilate 7c. per. lb. higher.
Malachite green, straight, PTMA, bbls, works lb. 5.30 - —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride, dms., c.l., dlvd. E. of Rockies lb. .28¾- —
dms., l.c.l., dlvd. E. of Rockies lb. .29¾- —
tanks, dlvd. E. of Rockies lb. .27¾- —
Prices on maleic anhydride W. of Rockies, 1½c. per. lb. higher.
Malic acid, tech., dms. lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 - —
dms., smaller lots lb. 2.40 - 2.50
Mandrake root, bls lb. .40 - —
Manganese acetate, dms., dlvd lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 - .18
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton.148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis ton.144.50 - —
40,000 to 99,999-lb. lots, dms. same basis ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms. lb. 1.84 - —
Manganese hydrate, dms., dlvd. lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms. lb. .35¾- —
Solid, precip., 8.2% Mn, bbls. lb. .41¼- —

Manganese metal, electrolytic, dms., c.l., dlvd. E. lb. .34 - —
dms., ton lots, dlvd. E. lb. .36 - —
dms., smaller lots, dlvd. E. lb. .38 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .29¾- —
Manganese resinate, fused, 3½% Mn, dms lb. .25¼- —
Precip., 6½-7% Mn, dms lb. .33 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd S. E. ton.97.50 - —
bgs., l.c.l., dlvd. S. E. ton.104.50 - —
Manganese tallate, 6%, dms. lb. .26 - —
Manila copal gum, C, bgs. lb. .35 - .39
DBB, bgs. lb. .25 - .28
DK, bgs. lb. No stocks.
DK, dust bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 - .24
WS, bgs. lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
fib. dms. to ton lots, works lb. .62 - —
fib. dms., single dm., works lb. .65 - —
Marine pitch, dms. lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .27½- —
bgs., l.c.l., works lb. .29 - —
Menadione USP, bots. gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .07¼- —
Menthol, nat., USP, Brazilian, cs. lb. 6.25 - 6.40
Japanese, cs. lb. 7.00 - 7.18
Syn., USP, racemic, cns lb. 4.50 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs. fib. dms. less ton lots, same basis lb. .46 - —

Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .54 - —
bgs., fib. dms., less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more lb. 4.98 - —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 4.78 - —
Mercuric cyanide, NF VIII, powd., fib. dms lb. 6.84 - —
Mercuric iodide red, NF, 100-lb. dm., f.o.b. works lb. 7.72 - —
Mercuric oxide, red., NF IX, 50-lb. dm., 100 lbs., f.o.b. works lb. 5.97 - —
tech., 50-lb. dm., 100 lbs., same basis lb. 5.77 - —
Mercuric oxide yellow, NF, 50-lb. dm., 100 lbs., same basis lb. 6.14 - —
tech., bbls., 1,000-lb. lots lb. 5.58 - —
bbls., smaller lots lb. 5.60 - —
Mercurous chloride (see Calomel).
Mercurous iodide yellow, NF, 100-lb. dm., f.o.b. works lb. 8.22 - —
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lbs. per flask, net-flask.231.00 -234.00
Mesityl oxide, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 - .73

Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, frt. equald lb. .42½- —
dms., smaller lots, frt. equald, lb. .43 - .75
tanks, works, frt. equald lb. .40 - —
Methanol, nat., denaturing grade, tanks, frt. alld gal 85 —
Syn., zone 1, dms., c.l or t.l. min., dlvd gal. .51½- —
dms., l.c.l., dlvd gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 - —
zone 2, dms., c.l. or t.l., min., frt. alld. or dlvd gal. .55½- —
dms., l.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min. dlvd. gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

ONE LABEL — *First Grade Only*
ONE PRICE — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!

M. C. P.
Pure
Unadulterated
California
LEMON OIL
U. S. P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by
MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb.21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb.27.25 - —
Methenamine (see Hexamethylenetetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt alld lb 1.25 - —
dms., t.t.l., same basis lb 1.29 - —
dl-Methionine, fib. dms., frt. alld., 50-lb or more lb 3.50 - —
Feed grade 98%, fib. dms., same basis lb 1.55 - —
Methyoxychlor, 50% wettable powder, dealers, dms., cs.,
Methyl abietate non-ret. dms., c.l., dlvd. zone 1 lb. .21½ —
non-ret. dms., t.c.l., same basis lb .22 .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd. zone 1 lb. .23½ —
non-ret. dms., t.c.l., same basis, lb .24 .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio., Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat., dms., t.c.l., E of Miss., frt alld gal. .62½ —
Methyl acetone, syn., dms., c.l., frt. alld. E gal. .66 - —
dms., t.c.l., frt. alld. E. gal. .76 - —
tanks, frt. alld. E. gal. .51 - —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., t.t.l., dlvd. lb. .40 - —
tanks, dlvd. lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 - —
dms., t.c.l., dlvd. E. lb. .18½ —
tanks, dlvd. E. lb. .14½ —
Methylamyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb. .18½ —
tanks, dlvd. lb. .14½ —
Methylamyl ketone, dms., works lb. 1.05 - —
N-Methylaniline, tech., tanks, frt. alld. lb. .68 - —
Methyl anthranilate, cns. lb. 2.25 2.75
Methyl benzoate, cns., dms. lb. .65 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 .65
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs lb. 1.05 - —
Methyl cellulose, standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 - —
50-lb bgs., smaller lots, frt. alld. on 100-lbs lb. .79 .89
Methyl chloride, mdust. cyls., frt. equald lb. .22¼ —
tanks, multi-unit, same basis. lb. .16¼ —
tanks, single unit, same basis. lb. .12¾ —
Refrigerator mfrs., cyls., dlvd lb. other consumers or service men, cyls., dlvd lb. .48¾ - .67¾ —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd. lb. .16½ —
tanks, dlvd. lb. .12½ —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., t.c.l., works lb. .45¾ —
tanks, works lb. .43 - —
Methyl formate, refd., dms. lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works lb. .21½ —
100-lb. multiwall paper bgs., t.t.l., works lb. .23 - —
Methyl heptin carbonate, bots lb.28.00 - 31.00
Methyl p-hydroxybenzoate, fib. dms. lb 1.90 2.00
Methyl ionone, standard, cns. dms. lb. 3.40 - 3.85
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., t.c.l., dlvd. lb. .18½ —
tanks, dlvd. lb. .14½ —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va. lb. .31 - —
dms., smaller lots, same basis lb. .31½ —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Methyl parathion tech., 80%, dms., frt. alld. E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms. lb. 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼ —
dms., t.c.l., same basis lb. .62½ .67½
Methyl testosterone USP, 100-gram bots gram. No Prices.
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb. 2.80 - —
Methyl violet toner, tungstated, PTMA, bbls., same basis. lb. 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd lb. .13½ —
dms., t.c.l., t.t.l., dlvd lb. .15¾ —
Methylene chloride, tech., tanks, 4,000-gal. min., dlvd lb. .12¼ —
tanktrucks, 1,000-gal. min., dlvd lb. .13¼ —
b-Methylnaphthalene, 32°C., m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
Mica, wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06½ —
bgs. t.c.l. ex-whse. lb. .07¼ —
paint or lacq., bgs., c.l., 325 mesh, works frt. alld E. lb. .08¼ —
bgs., t.c.l., ex-whse, or freight alld. E lb. .09 - —
rubber, bgs., c.l., works, frt. alld E lb. .08 - —
bgs., t.c.l., ex-whse or frt. alld. E lb. .08¼ —
wallpaper bgs. c.l. works, frt. alld. E lb. .08¾ —
bgs. ex-whse. or frt. alld. E. lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼ —
t.c.l., ex-whse., or frt. alld E. lb. .09 - —
Mica, wet-grd. w. of Miss. ½c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
Microcrystalline wax, petroleum, laminating grades, tankcars, works lb. .11 .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .62 - —
non-ret. dms., t.c.l., same basis gal. .67 - —
tankcars, refy. gal. .46 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .62 - —
tankcars, refy. gal. .46 - —
80-90 vis., non-ret. dms., c.l., same basis gal. .63 - —
non-ret. dms., t.c.l., same basis gal. .68 - —
tankcars, refy. gal. .47 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .69 - —
non-ret. dms., t.c.l., same basis gal. .74 - —
tankcars, refy. gal. .53 - —
145-155 vis., non-ret. dms., c.l., same basis gal. .75 - —
non-ret. dms., t.c.l., same basis gal. .80 - —
tankcars, refy. gal. .59 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .77 - —
non-ret. dms., t.c.l., same basis gal. .82 - —
tankcars, refy. gal. .61 - —
200-210 vis., non-ret. dms., c.l., f.o.b. New York gal. .84 - —
200-210 vis., non-ret. dms., t.c.l., same basis gal. .89 - —
tankcars, refy gal. .63 - —
300-350 vis., non-ret. dms. c.l., f.o.b. New York gal. .84½ —
non-ret. dms., t.c.l., same basis gal. .89½ —
tankcars, refy gal. .68½ —
Mineral orange, American, bbls., c.l., works lb. .1560- —
bbls., t.c.l., same basis lb. .1660- —
Mineral spirits, petroleum, odorless, tanks, refy Watson, Calif. gal. .25 - —
tanks, Borger, Tex. gal. .25 - —
Houston, Tex. gal. .25 - —
Philadelphia gal. .32 - —
Newark gal. .29 - —
New York gal. .30½ —
Wood River, Ill. gal. .2725 —
tankwagon, New Jersey, dlvd. gal. .37½ —
tankwagon, New York, dlvd. gal. .38½ —
regular tanks, Calif., ex tax San Francisco gal. .109 - —
tanks, east coast, New Jersey, New York gal. .18 - —
tanks, group 3 gal. .12875 —
tanks, Houston, Tex. gal. .145 - —
tankwagon, Boston gal. .20 - —
Buffalo gal. .20½ —
Chicago gal. .289 - —
Cleveland gal. .23½ —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½ —
Pittsburgh gal. .19 - —
Providence gal. .20½ —
Mirbane oil (see Nitrobenzene)
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .11 - .11¼
tanks, New York ga' .6 - —
Molybdated orange, bbls. lb. .3 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo 9.13 - —
Molybdenum trioxide, purif., dms., works lb 1.15 - —
Tech., chemical, dms., works, basis Mo content lb. 1.48 - —
Tech., metallurgical, dms., works, basis Mo content lb. 1.47 - —
Molybdic acid, 85%, dms., works. lb. 1.05 - 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 - —
dms., c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½ —
dms., t.c.l., same basis lb. .59 - —
tanks, same basis lb. .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., t.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10½ —
dms., t.c.l., same basis lb. .11½ —
tanks, same basis lb. .08¾ —
Monoethanolamine, dms., c.l., dlvd. E lb. .27½ —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis lb. .38½ —
dms., t.c.l. dlvd. E. 100% basis, lb. .40 - —
tanks, dlvd. E., 100% basis lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd E lb. .27¼ —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½ —
dms., t.c.l. same basis lb. .35 - —
tanks, same basis lb. .31 - —
Monomethylamine, anhyd., cyls., t.c.l., frt. equald., 100% basis lb. .30 - —
tanks, same basis lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .36 - —
dms., t.c.l., frt. equald., 100% basis lb. .36½ —
tanks, frt. equald., 100% basis, lb. .26 - —
Monomethylamine, 40% soln., dms., frt. equald., 100% basis. lb. .33 - —
dms., t.c.l., frt. equald., 100% basis lb. .33½ —
Monomethylamine, 40% soln., tanks, frt. equald., 100% basis lb. .26 - —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 - —
bgs., t.c.l., dlvd. E lb. .32 - —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb. 3.05 - —
dms, 100-lb lots, same basis lb 3.25 - —
Monosodium glutamate, dms., 100 lbs., dlvd lb. 1.00 - 1.07
Monosodium phosphate (see sodium phosphate, monobasic).
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., t.c.l., same basis lb. .56 - —
tanks, same basis lb. .54 - —
Montan wax, Calif., refd., bgs. lb. .27 - .28
imp., crude, Bohemian, bgs. lb. .22 - .24
German, bgs. lb. .26 - .27
Morphine, cns. oz.12.40 -12.60
Morphine acetate, anhyd., cns. oz. 9.95 -10.00
Morphine hydrobromide, cns. oz. 9.90 - 9.95
Morphine hydrochloride, NF, cns oz. 9.90 - 9.95
Morphine sulfate, USP, cns. oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd. E lb. .55¼ —
dms., t.c.l., dlvd. E. lb. .56¼ —
tanks, dlvd. E. lb. .52¾ —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots lb. 4.40 - 4.90
cns., 25-lb. lots lb. 4.50 - 5.00
Ketone, fib. dms., 100-lb. lots lb. 4.60 - 5.10
cns., 25-lb. lots lb. 4.70 - 5.20
Xylol, fib. dms., 100-lb lots lb. 1.40 - —
cns., 25-lb lots lb. 1.45 - —
Mustard seed, Danish yellow, bags. lb. .11½ —
Montana, yellow, bgs. lb. .10¼ —
Oriental, bgs. lb. .08 - —
Mustard oil, syn. bots. lb. 1.60 1.85
Myristic acid, bgs. lb. .31½ - .34
tanks lb. .30½ —
Myrrh gum, cs. lb. .55 - —

N

Naphtha, high sovency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tanks, west coast, Los Angeles gal. .174 - —
Portland, Ore. gal. .18 - —
San Francisco gal. .179 - —
Seattle, Wash. gal. .18 - —
east coast, New Jersey and New York gal. .19 - —
group 3 gal. 13875 —
tankwagon, Boston gal. .21½ —
Chicago gal. .299 - —
Cleveland gal. .24½ —
Houston, Tex. gal. .15½ —
Newark gal. .20½ —
New York gal. .20½ —
Philadelphia gal. .21½ —
Pittsburgh gal. .20 - —
Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .04¼ —
78°, tanks, same basis lb. .05 - —
Imp., 78°, bgs., large lots lb. .06½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald lb. .12½ —
tanks, same basis lb. .09¾ —
indust., balls, flakes, wholesale, CP, NF, consumer, cbys., extra, c.l., works lb. .18½ —
cs., 50 lbs., c.l., same basis, lb. .15¾ —
1-lb. pkgs., c.l., same basis, lb. .18½ —
a-Naphthol, bbls., frt alld lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
bbls., t.c.l., works lb. .35 - —
Naphthol, ITR, red toner, bbls., works lb. 5.50 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid)
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, bbls. frt. alld lb. .50 - —
b-Naphthylamine, tech. flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid)
Naringin, fib. dms lb 8.50 -
Neatsfoot oil, 15° cold test, dms lb. .30 Nom.
20° cold test, dms lb. .29 Nom.
30° cold test, dms lb. .28 Nom.
Neocinchophen, USP dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 - —
fib. dms., 100-999-gram lots, basis activity gram. .30 - —
Tech., fib. dms gram. .14 - —
Neroli oil, NF, French, bots. lb.425.00 -575.00
Tunisian, bots. lb.400.00 —
Nerolin, cns. lb. 2.55 - 2.85
Neville and Winther's acid, dms., frt. plld lb. 1.30 - —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .68½ - .75½
Nickel carbonate, bbls., dlvd lb. .78¼ - .85¼
Nickel chloride, bbls., dlvd lb. .37 - .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 - .73
Nickel metal, electro cathodes, cs., works lb. .74 - —
Nickel nitrate, bbls., works lb. .32½ - .33½
Nickel oxide, black, bbls lb. .85 - —
Green, bbls. lb. .84 - —
Nickel sulfate, bgs., c.l., dlvd lb. .28 - —
bgs., t.c.l., dlvd lb. .28½ - .36
Nicotinamide, USP, 50-kilo dm., frt. adjusted kilo. 8.00 - —
Nicotinamide hydrochloride, dms., frt. adjusted kilo. 8.00 - —
Nicotine sulfate, 40%, dealers, 80-lb. dms. frt. alld. lb. 1.20 - —
40%, manufacturers, 500-lb. dms., frt. alld. lb. 1.05 - —
Nicotinic acid, USP, dms., dlvd. kilo. 6.00 - —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb. .10¼ —
Nikethamide, cbys. lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E. 100 lbs. 5.75 - —
cbys., t.c.l., works E 100 lbs. 6.05 - 6.85
38° Be., cbys., c.l., works, E. 100 lbs. 6.25 - —
cbys., t.c.l., works E. 100 lbs. 6.55 - 7.35
40° Be., cbys., c.l., works, E. 100 lbs. 6.75 - —
cbys., t.c.l., works, E. 100 lbs. 7.05 - 7.85
42° Be., cybs., c.l., works, E. 100 lbs. 7.25 - —
cbys., t.c.l., works, E 100 lbs. 7.55 - 8.35
Nitric acid, 58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
Nitric acid, CP, NF consumer, cbys., extra, c.l., works lb. .18½ —
cbys. extra, t.c.l., works. lb. .20 - —
5-pint bots., extra, cs., c.l., same basis lb. .22½ —
5-pint bots., extra cs., t.c.l., same basis lb. .24 - .25
4-Nitro-2-aminophenol tech., paste, dms., frt. alld lb. .99 - —
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 - —
Paste, dms. frt. alld., 100% basis. lb. 1.10 - —
o-Nitroaniline, flaked, dms. t.l., frt. alld lb. .49 - —
dms., t.t.l., frt. alld lb. .51 - —
o-Nitroaniline orange toner, kegs, lb. 1.35 - —
p-Nitroaniline, dms. frt. alld lb. .445 - —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .13 - —
dms., t.c.l., frt. alld lb. .14 - —
tanks, frt. alld lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
dms., t.c.l., works lb. .64 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½ —
bbls., t.c.l., same basis lb. .33½ .40½
18-20, cps., bbls., c.l., same basis lb. .39½ —
bbls., t.c.l. same basis lb. .40½ .42¼
250-400, 600-1,000 seconds, bbls., t.c.l., same basis lb. .43 - .46
Nitrocellulose, spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .43 - —
bbls., t.c.l., same basis lb. .44 - .46
Spirit soluble, 5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 - —
bbls., t.c.l., same basis lb. .43 - .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 - —
dms., t.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-p-cresol, tech., dms., dlvd. lb. .88 - —
Nitroethane, dms., c.l., dlvd. E lb. .25 - —
dms., t.c.l., dlvd E lb. .26½ —
tanks, dlvd. E lb. .22½ —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald., N. unit. 1.20 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 Nom.
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works unit-ton. 3.10 - .50
Nitromethane, dms., t.l., dlvd. E lb. .25 - —
dms., t.t.l., dlvd E lb. .26½ —
Nitromethane prices West of Rockies are 1c. higher.
a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., t.c.l., frt. alld lb. .47 - —
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .23½ —
dms., t.c.l., same basis lb. .25 - —
tanks, same basis lb. .21 - —
2-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .18½ —
dms., t.c.l., same basis lb. .20 - —
tanks, same basis lb. .16 - —
Nitropropane prices West of Rockies are 1c. per lb. higher.
m-Nitrotoluene, tech., dms., frt. alld. lb. .45 - —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .15 - —
dms., t.c.l., frt. alld. lb. .16 - —
tanks, frt. alld. lb. .13 - —
p-Nitrotoluene, tech., cast, tanks, works lb. .26½ —
c.l., t.l., dms., same basis lb. .27½ —
t.c.l., dms., same basis lb. .28 - —
p-Nitrotoluene, tech., flake, c.l., t.l., works lb. .27½ —
t.c.l., dms., same basis lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms., c.l., frt. alld. lb. .22 - —
dms., t.c.l., frt. alld lb. .23 - —
tanks, frt. alld lb. .19½ —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.36 - —
West Indian, bgs lb. 1.45 - —
Nutmeg oil, USP, dist., East Indian, cns lb. 9.50 -12.75
West Indian, cns lb. 9.50 -12.75
Nux vomica, bls lb. .20 - —
Powd., bbls., bxs lb. .20 - .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms lb. .43 - .63
Octane, indust., tanks, Bayonne, N.J. gal. .20 - —
Borger Tex. gal. .15¾ —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½ —
dms., t.c.l., dlvd. Zone 1 lb. .45½ —
tanks, dlvd., Zone 1 lb. .41 - —

Octyl alcohol, perfumers' grade, bots lb. 1.60 - 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
Octyl phenol, bgs., c.l., works lb. .22 - —
bgs., l.c.l., works lb. .22½- —
tanks, works lb. .21 - —
Octyl phenol in dms. 11c. higher.

Oils

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .22 - .22½
tanks lb. .20½- —
Oleic acid, dbl.-dist. (white), dms. lb. .18 - .20½
tanks lb. .15½- —
Single-dist., dms. lb. .16¾- .19½
tanks lb. .14¼- —
Oleo oil, extra, dms. lb. .14 - .14½
Oleostearine, dms. lb. .12½- .13
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs. lb. .13 - .20
Tears, cs. lb. .22 .30
Olibanum oil, bots. lb. 5.00 7.65
Extra fine, bots lb. 8.00 9.50
Olive oil, edible, dms, spot, duty-paid gal. 2.50 - 2.75
Olivine, crude, works ton.12.00 —
20 mesh, works ton.15.00 —
100 mesh, works ton.20.00 —
Opium, USP cns oz.19.20 -19.45
gran., cns. oz.21.65 -21.90
powd., cns. oz.21.65 -21.90
Orange oil, expressed, USP, Brazilian, cns., dms lb. No stocks.
California, cns., dms lb. .85 - .90
Florida, cns., dms. lb. .70 - 1.25
Messina, cns. lb. 3.25- 5.00
West Indian, bitter cns., dms. lb. 2.50 - 3.25
Sweet, dist., cns., dms lb. .60 - —
Orange peel, bitter, Haitian, bls lb. .18 - .20
Sweet lb. .35 - 38

Orange Pigments

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns lb. 1.80 2.30
Orris root, Florentine, bls. lb. .55 —
powd., bbls, bxs. lb. .65 - —
Verona, bls. lb. .35 - —
powd., bbls., bxs. lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots., gram 3.00 - 4.00
Ouricury wax, crude, bgs. lb. .74 - .76
Refd., pure, bgs lb. .80 - .82
Oxalic acid, bgs. dms., c.l., works. lb. .18 - .18½
bgs., dms., 10,000-lb. lots, works. lb. .18¼- .18¾
bgs., dms., smaller lots, works. lb. .19¼- .19¾
b-Oxynaphthoic acid, fib dms., 250 lbs. or more, frt. alld., lb. 1.14 - 1.17
Oxyquinolin sulfate, cns., 100-lb. lots, works, lb. 4.75 - 5.00
cns., smaller lots, works lb. 4.92 - 5.17

P

Palm oil, clarif., dms lb. .1435- .1535
tanks lb. .1190- —
Palm oil acid, dist., dms. lb. .15¾- .19¼
tanks lb. .13¾- .14¼
Palmarosa oil, cns. lb. 3.75 - 4.00
Papain, NF, powd. lb. 5.00 - 7.00
Papaverine hydrochloride, nat. or syn., USP, cns. 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns., oz. 7.10 - 7.35
Paprika, Bulgarian bgs lb. .34 - .35
Hungarian, bgs. lb. .32 - —
Spanish, bgs. lb. .50 - —
Yugoslavian, bgs. lb. .34 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline)
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldenyde (see p-Chlorobenzaldehyde)
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. lb. 1.21 —
Chlorinated, kgs. lb. 1.35 - —
Paraffin, crude, scale, white, 123°-127°F. ASTM, tanks, refy. lb. .0655- —
122°-124°F, ASTM, tanks, refy. lb. .0765- —
125°-127°F, ASTM, tanks, refy. lb. .0763- —
130°-132°F, ASTM, tanks, refy. lb. .0765- —
Paraffin, crude, scale, white, 132°-134°F., ASTM, tanks, refy lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM.
Paraffin oil, pale, 100-110 vis. at 100°F., tanks, east coast refy. gal. .14 - —

Paraffin wax (see Paraffin).
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .10 - —
bgs., l.c.l., frt. alld lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
USP-X, fib. dms., c.l. lb. .19 - —
fib. dms., 1,000-lb. lots lb. .20 - —
fib. dms., smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal. dms., l.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene.
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion, ethyl, dms., frt. alld. lb. .84 - —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Paris green, dealers, 100 lb. dms., frt. alld lb. .45 - —
Passion flower herb, bls lb. .50 - .55
Patchouli oil, imp., cns lb. 4.80 - 5.25
Peach kernel oil, USP (see Apricot kernel oil)
Peacock blue, fugitive, 100% color strength, 250-lb., bbls., dlvd. E. of Rockies lb. 1.00 - —
Peacock blue price 1c. higher W. of Rockies.
Peanut meal, 45%, old process, bgs., mills ton.60.00 - —

Peanut oil, crude, tanks, f.o.b. mills. lb. .11¼- —
Refd., dms. lb. .17 - .17¼
tanks lb. .15 - —
Pectin, dom., NF, citrus, powd., bbls. lb. 2.05 - 2.06
tech., powd., 150 jelly grade. lb. 1.28 - —
Imp., Danish, ex whse lb. 1.28 - —
Penicillin potassium, cryst., bulk, 1,000,000 units. .027 - .028
Penicillin, procaine, bulk 1,000,000 units. .027 - .028
Pennyroyal oil, USP, imported, cns. lb. 2.30 - 3.10
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., l.c.l., same basis lb. 22½- .29
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .31 - —
bgs., l.c.l., dlvd lb. .32 - —
Pentaerythritol, di-and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb 6.00 - —
Pepper, black, Malabar, bgs lb. .24¾- —
black, Lampong, bgs lb. .24½- —
Red, Funtuas, bgs lb. .30 - —
Japanese, Hontaka, bgs lb. .30 - —
Santaka, bgs. lb. .30 - —
Sudanese, bgs. lb. .36 - —
White, Muntok, bgs lb. .45 - —

Peppermint leaves, dom., USP, bls., dms lb. .70 .75
Imp., USP., bls lb. .85 —
Peppermint oil, nat., dms. lb. 3.45 - 4.50
Redist., USP, dms lb. 3.75 5.15
Perchloroethylene, dms., c.l. or t.l., dlvd lb. .13½ —
dms., l.c.l., dlvd lb. .15¼ —
tanks, dlvd. lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd. lb. .12¼- —
Peri acid, dry, bbls., frt. alld lb. 1.60 - —
Paste, bbls., frt. alld lb 1.55 - —
Peru balsam, dms lb. 1.35 - 1.80
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American cns., dms lb. 2.45 - 3.20
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., l.c.l., dlvd. lb. .10125-.11375
tanks, refy. lb. .05875- —
Extra amber, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd. lb. .09125-.10375
tanks, refy. lb. .04875- —
Lily white, dms., c.l., refy lb. .08625- —
dms., l.c.l., dlvd. lb. .10625- .12
tanks, refy. lb. .06735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., l.c.l., dlvd. lb. .11125- .125
tanks, refy. lb. .06875- —

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Example:

chemicals for cleaning

Shipments of countless products travel safely, their purity assured, in carbon or stainless-steel shipping containers from United States Steel.

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United States Steel Products
Division of
United States Steel

Petrolatum, USP, soft yellow, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd lb. .093 .10375
tanks, refy. lb. .04875- —
Petroleum pitch (see Asphalt, petroleum)

Petroleum Products

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms. c.l., works lb. .16½ .18¾
non-ret dms., l.c.l., works lb. .17½ 19
tanks, works lb. .14½ .17
50-55%, sulfonic content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms. c.l. frt alld. E lb. .91 - —
dms. l.c.l. same basis lb .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb 1.05 - —
dms. same basis lb 1.08 - —
Phenobarbitol USP dms. 100-lb lots lb 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital)
Phenol, 90-92% (cresol 8-10%) non-ret dms. frt alld E of Rockies lb. .16¾- —
non-ret dms. l.c.l. same basis. lb. .17¾- —
tanks, same basis lb. .14¾- —
82-84% (cresol 16-18%) non-ret, dms., c.l., same basis lb. .16½- —
non ret. dms., l.c.l., same basis, lb. .17½- —
tanks, same basis lb. .14½- —
30°C. or above, tar distilled, non-ret. dms., c.l., same basis lb. .18 - —
non-ret dms. l.c.l. same basis. lb. .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l. frt. alld. lb. .18½- —
dms., same basis lb. .20½- —
tanks, same basis lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld. lb. 1.30 - —
250-lb. dm., same basis lb. 1.35 - —
Phenothiazine drench fib dms. t.l., dlvd lb 44 - —
fib dms. t.t.l., same basis lb 47 - —
NF, fib. dms., t.l. same basis lb 43 - —
fib dms. l.t.l. same basis lb 46 - —
Phenyl acetate, dms. 100-lb lots, works lb .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots lb 2.95 —
100%, bots. lb 4.00 4.65
Phenylacetic acid, pure, cryst. cns. lb 1.25 1.75
dl-Phenylalanine, dms works lb.27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms 200-lb lots dlvd E. lb 3.45 - —
fib dms. smaller lots, dlvd E lb 3.80 - —
N-Phenyldiethanolamine dms c.l., dlvd E lb .41 —
dms., l.c.l., dlvd. E lb. .42½- —
tanks, dlvd E lb. .38½- —
m-Phenylenediamine, dms. frt alld. lb 1.10 - —
o-Phenylenediamine coml., 100 to 1,000 lbs fib dms. works lb 1.70 1.80
p-Phenylenediamine refd., dms. works lb 1.42 —
Tech. dms. works lb 1.40 —
Phenylethanolamine, dms., c.l., works lb .75½- —
dms. l.c.l., same basis lb .77 - —
Phenylethyl acetate bots. lb 1.30 1.60
2-Phenylethyl alcohol, extra, dms. lb 1.14 1.50
Standard, dms. lb 1.10 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld lb. 1.50 - —
dms., smaller lots, frt. alld lb. 1.70 - 1.85
Phenylethylphenyl acetate bots lb 4.00 4.25
Phenylglyconic acid (see Mendelic acid)
Phenylhydrazine, 97%, 450-lb dms. lb 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib dms., 250-lb. lots, dlvd E lb 1.80 - —
fib, dms. smaller lots, dlvd E lb 2.10 - —
o-Phenylphenol, dms., l.c.l., works. lb. .48 .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾- .26
nubs, bgs. lb. .33¼- .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .22¾- .25
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works lb.17.75 - —
Tech., fib dms., works lb.10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton.48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines, long-ton 5.16 - —
55-70%, b.p.l., bulk, c.l., same basis long-ton. 5.56 - —
70-72%, b.p.l., bulk, c.l., same basis long-ton. 6.21 - —
74-75%, b.p.l., bulk, c.l., same basis long-ton 7.21 - —
76-77%, b.p.l., c.l., bulk, same basis long-ton 8.21 - —
Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.52.
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., l.c.l., same basis, 100 lbs. 7.25 - 7.75
tanks, t.w., works 100 lbs 5.60 - —
80%, cbys., c.l., frt. equald 100 lbs 7.85 - —
cbys., l.c.l., works 100 lbs. 8.10 9.35
tanks, t.w., works 100 lbs 6.00 —
NF, 85%, cbys., c.l., works.100 lbs. 8.50 —
cbys., l.c.l., works 100 lbs. 8.75 9.00
tanks, t.w., works 100 lbs. 6.65 - —

Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. 20 - .20½
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms., l.c.l., works lb. .14½- 15½
Solid, dms., c.l., works lb. .11½- —
dms., l.c.l., works lb. .12½- 13½
Phosphorus pentoxide, dms., c.l., works lb. .1395- .1450
dms., l.c.l., works lb. .1550- .1650
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 - —
dms., l.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .17 - .19
bgs., l.c.l., same basis lb. .18 - .20
tanks, same basis lb. .16½- .18½
Phthalimide, 97-98%, dms., frt. alld lb. .65 —
Phthalocyanine blue, full strength, bbls dlvd. E. of Rockies lb 2.90 - —
Resinated, bbls., same basis lb 2.75 - —
Water dispersable, bbls., same basis lb. 1.52 - —
Phthalocyanine blue prices 1c. higher W of Rockies
Phthalocyanine green toner, bbls., works lb 3.35 - —
Resinated, bbls lb 3.00 - —
Water dispersable, bbls lb 1.71 - —
Phthalocyanine green prices 1c. higher W of Rockies
Phthalylsulfacetamide, fib dms., 1,000-lb lots or more lb 5.00 - —
NF, fib, dms lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald lb. 43 .43½
dms., l.c.l., works, frt. equald lb. 44 —
tanks, same basis lb. 415 .422
b-Picoline, 98%, dms. t.l., works. lb 1.05 - —
dms., l.c.l., same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 5°C. ums. c.l., works lb. .32½- —
dms., l.c.l., works lb 33 - —
g-Picoline, dms., f.o.b., works lb. 1.60 - —
tanks, t.l., same basis lb. 1.50 - —
Picric acid, NF, bbls. lb 85 - —
Tech, bbls lb 44 - —
Pigment green B, kgs. lb. 1.45 - —
Pilocarpine hydrochloride, USP bots oz. 5.25 - —
Pilocarpine nitrate, USP bots. vials. oz. 5.15 - —
Pimento, Jamaican, bgs lb. .68 - —
Mexican, bgs. lb. .57 - —
Pimento berry oil, NF, dms. lb. 3.75 9.25
Pimento leaf oil, crude, cns. lb. 2.10 2.48
Pine oil, dest.-dist. dms., l.c.l. works lb. .15 - —
dms., l.c.l ex whse New York. lb. .173 - —
Pine oil, steam-dist. dms ex whse. New York lb. .185 - —
dms., dlvd. lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberica oil)
Pinetar oil, coml. dms. c.l., works. lb. .0561- —
dms., l.c.l., works lb. .0634- —
dms., c.l., ex whse New York. lb. .0745- —
tanks, works lb. .046 - —
Pinetar oil, NF, rectified, dms., incl., l.c.l., works, South. lb. .40 - —
dms., l.c.l., ex whse, New York lb. .41½- —
Refd., dms., incl., l.c.l., works lb. .35 —
dms., incl. l.c.l., ex whse New York lb. .36½- —
Pink root, bls. lb. 1.75 - —
Piperazine, anhyd., dms. t.l., frt. alld lb 1.60 - —
dms., l.c.l., same basis lb 1.65 - —
Piperazine citrate 36%, dms., 1,000 lbs. or more, frt. alld lb. 1.15 - —
Piperazine dihydrochloride, 51%, dms., 1,000 lbs. or more, frt. alld lb. 1.23 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs. or more frt. alld lb. .77 - —
dms., l.t.l., same basis lb. .90 - —
Piperazine phosphate 42%, dms., 1,000 lbs. or more, frt. alld.lb. 1.06 - —
Piperidine, dist. 98% min., dms., frt. equald lb. 2.60 - —
Piperonyl butoxide dms. dlvd E.lb 4.50 5.05

Pitches

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).
Platinum metal, works oz.76.00 -80.00
Pleurisy root, bls. lb 45 .50
Podophyllum resin, NF, dms. lb.15.60 - —
Poke root, bls. lb. .19 - .22
Polymyxin, bulk, bots., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units, 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units, 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms. 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works. lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49

Pontianak copal gum, chips bgs lb. .38 - —
Nubs bgs lb .37 40
Poppy seed, Argentine, bgs. lb No stocks.
Dutch, bgs. lb. .22 - —
Danish, bgs. lb. .20½- —
Polish, bgs. lb. .20 - —
Turkish, bgs. lb. .17½- —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs 4.25 - —
dms., l.c.l., same basis 100 lbs 5.05 - —
tanks, same basis 100 lbs 3.70 - —
flake, 88-92%, dms., c.l., same basis 100 lbs 9.15 - —
dms., l.c.l., same basis. 100 lbs.10.20 - —
Potash, solid, 88-92%, dms., c.l., works 100 lbs. 8.70 - —
dms. l.c.l. works 100 lbs 9.75 - —
Potassium acetate, NF, 200-lb. dm., f.o.b works E lb. .31 - —
Potassium bicarbonate, USP, gran. dms lb .22 - —
USP, powd., dms. lb .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., l.c.l., works lb. .18½- .19¾
Potassium bichromate in dms. ¾c higher.
Potassium bitartrate, 100-lb. bgs., c.l., frt. equald lb. .37 - —
100-lb. bgs., 5,000 lbs., 1 shipt., same basis lb. .38 - —
100-lb. bgs., smaller lots, same basis lb. .40 - —
Potassium borohydride, powd., dms., works lb.16.00 -22.00
Pelletized postassium borohydride $1.25 per lb higher in 1,000-lb. lots.
Potassium bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
dms., smaller lots, works lb. .52 - .62
Potassium bromide USP, gran. bbls., kgs lb. .39 .40
Potassium carbonate, dom., NF, gran., bbls dms lb. .20 - —
Potassium carbonate, dom tech., powd., bbls., dms lb. .21 - .22
calcined, bgs., c.l., works, 100 lbs 8.50 - —
bgs., l.c.l., same basis, 100 lbs. 9.55 - —
Potassium carbonate, hydrated, 83-85%, bgs., c.l., works 100 lbs 7.10 - —
bgs., l.c.l., works 100 lbs 8.15 - —
Potassium chlorate, cryst., dms., c.l., works lb. .12¼- —
dms., l.c.l., works lb. .13½- .14½
Powd., dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
works lb. .12¼- —
Potassium chlorate NF cryst., dms., 2,000 lbs or more works. lb. .16¾- —
NF, gran. 25-lb. metal dms lb. .36 - —
NF, powd., dms., 2,000 lbs. or more works lb. .17¼- —
Potassium chloride, indust., 99.9% KCL, bulk, c.l., works ton.29.00 - —
bgs., c.l., works ton 33.50 - —
99.3% KCL, bulk, c.l., works.ton 27.00 - —
bgs. c.l. works ton 31.50 - —
USP, cryst., dms. lb .20 - .22
USP, gran., dms. lb. .21 - .23
USP, powd., dms. lb. .24 - .26
Potassium chloride, agricultural (see Potassium muriate)
Potassium chromate tech., dms., works lb. .50 - .51
Potassium citrate, NF, gran., 250-lb. dm., f.o.b. works E lb. .43 - —
powd., 250-lb. dms., same basis. lb. .46 - —
Potassium cyanide, dms 20,000-lb. lots or more, works lb. .42½- —
dms., 2,000-19,999-lb lots, works. lb. .43 - —
dms., smaller lots, works lb. .44 - .44½
Potassium dichromate (see Potassium bichromate)
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. .65 - —
Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms., smaller lots lb. .29 - —
Potassium fluoborate, fib dms., c.l., works lb. .30 - —
fib dms. t.c.l., works lb. .31 - —
Potassium fluoride, dms. works lb. .37 - .38
Potassium gluconate, 100-lb. dm., f.o.b. works E lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms lb 2.10 2.30
Potassium hydroxide, tech (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots lb .33½- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb lots lb. 1.38 - —
Potassium iodide, USP, cryst., gran., or powd., 250-lb. dm., f.o.b. works lb. 1.40 - —
Potassium manure salt, 22% K.O, bulk, c.l., works unit-ton. .17 - .1765
Potassium metabisulfite, gran., dms. lb. .16 - —
Powd., dms. lb. .27 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .30 - .32
bagged, 60% minimum K.O, same basis ton.22.90 -24.10
Gran., bulk, c.l., works unit-ton. .30½- .32½
bagged, 60% minimum K.O, same basis ton.23.20 -24.40
Inside prices apply to material contracted for prior to July 1, 1959.
Outside prices apply to material contracted for after that date but also for delivery during the current month.
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs.17.00 - —
bbls., smaller lots 100 lbs.18.00 -19.00
NF, gran., bgs., 20-ton lots. 100 lbs. 9.50 —
bgs., smaller lots 100 lbs.11.00 -12.00
NF, powd., bgs., 20-ton lots. 100 lbs.10.50 - —
bgs., smaller lots 100 lbs.12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E lb. .32 - —
Potassium pentaborate, gran., dms., c.l., works ton.219.50 - —
dms., ton lots, ex whse. ton.311.00 - —
dms., smaller lots, ex whse ton.316.00 - —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works lb. .19 - .20
Potassium permanganate, coml., kgs., works lb. .25 - .33
USP, dms., works lb. .29 - .35
Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .15½- .18½

Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate yellow (see Potassium ferrocyanide).
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., t.c.l., 5 dm. lots or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works. 100 lbs. 5.95 - —
dms., t.c.l., 5 dm. lots or more works 100 lbs. 6.70 - —
tanks, works 100 lbs. 5.60 - —
Potassium silicate, glass grade, bgs. c.l., works 100 lbs.17.30 -18.15
bgs. t.c.l., works 100 lbs.17.80 - —
Potassium silicate, soln., 29° Be, 1:2.5, dms., c.l., works. 100 lbs. 4.95 - —
dms. t.c.l., 5-dm. lots or more, works 100 lbs. 5.70 - —
tanks, works 100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works lb .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb higher.
Potassium stannate, dms., frt alld. E lb. .784 - .857
Potassium sulfate, agricultural, bulk, c.l., works unit-ton. .59½- .61¼
Inside price applies to tonnage contracted for prior to July 1, 1959.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month
Potassium sulfate, NF VII, cryst., dms lb. .31 .33
NF VII, gran., dms lb. .18½- —
NF VII, powd., dms lb. .16 .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate)
Potassium thiocyanate, NF, cryst., dms., works lb. .96 .98
Tech., dms., works lb. .77 .79
Potassium titanate, ctns., c.l., works. lb. .16¼- —
ctns., 5-ton lots, works lb. .16½- —
ctns., 1-ton lots or less, works lb .16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price ton.13.45 - —
bulk, works, July forward ton.14.00 - —
Potassium-sodium tartrate, NF gran. or powd., 250-lb. dms., c.l., f.o.b. works E lb. .42½- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½- —
Potassium-titanium fluoride, fib. dms., works lb. .39 .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 —
fib dms., t.c.l., works lb. .52½- .55
Pregnenolone, bots gram. No prices
Pregnenolone acetate, bots. gram. No prices
Procaine hydrochloride, USP, dms., 1,000-lb lots, frt. alld lb 2.60 —
dms. 100-500 lb lots lb. 2.95 3.15
Progesterone, USP, bots. gram. No prices.
Progesterone acetate, bots. gram. No prices.
Propane, indust. tanks, group 3 gal. .05 —
tanks, Baton Rouge gal. .03375- —
tanks, New York harbor gal. .1005- —
(¼c. discount offered).
Propenyl guaethol, dms. lb.24.30 -27.00
Propionic acid syn., pure, dms., c.l., works lb. .23¼- —
dms., t.c.l., works lb. .24¼- —
tanks, works lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., t.c.l., dlvd. lb. .16¾- —
tanks, dlvd. lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - —
dms., t.c.l., dlvd. lb. .15½- —
tanks, dlvd. lb. .11½- —
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb. 3.90 - 4.40
n-Propyl-p-hydroxybenzoate USP, dms lb 2.30 2.40
Propyl thouracil, bots., 50 kilo lots or more kilo.55.00 —
bots., smaller lots kilo.55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb. 1.24 - —
dms., t.c.l., same basis lb. 1.255 - —
Propylene dichloride, consumers' dms., c.l., dlvd. E lb. .0845- —
dms., t.c.l., same basis lb. .0995- —
tanks, same basis lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis.
Propylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., t.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
USP, dms., c.l., dlvd. E lb. .18 - —
dms., t.c.l., same basis lb. .19½- —
tanks, same basis lb. .15½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide, dms., c.l., dlvd. E. lb. .18 —
dms., t.c.l., dlvd. E lb. .19½- —
tanks, dlvd E lb. .15½- —
Psyllium seed, black, bgs. lb. .32 .34
Blonde, bgs. lb. .18 - .20
Husks, bgs. lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03½- .04¼
bgs. smaller lots lb. .03½- —
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs ton lots lb .04 —
sun dried, coarse, bgs ton.60.00 —
fine, bgs. ton.60.00 -70.00
Pumpkin seed, bgs. lb. .25 - .26
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .48 - —
Powd., 1.3% pyrethrins, bags, ton, works lb. .69 - —
Pyrethrum liquid, 20:1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 9.35 - 9.45
100:1 basis (10 grams pyrethrins per 100cc odorless base), dms., works gal.44.75 -45.25
Pyrethrum oleoresin, dewaxed, 20% dms., works lb.10.60 -10.95
purif., 20%, dms., works lb.10.60 -10.95
Pyridine, denat., dms. c.l., works and frt equald gal 2.77 - —
dms t.c.l. same basis gal 2.80 - —
Refd., 2° non-ret dms. t.c.l., same basis lb. .70 - —
tanks, same basis lb. .65 - —
Pyridoxine hydrochloride, USP, 500-gram bots., dms., f.o.b. works. kilo.175.00 - —
gram lots or more kilo.175.00 - —

Pyrites, Canadian, 48-50% S, mines, long-ton 5.00 - 6.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls. ..... lb. 3.17 - 3.25
Pyrogallol, NF, 100 lb. dms. ..... lb 3.50 - —
Pyroxylin, USP. bots. ..... lb. 9.50 - —

Q

Quassia chips ..... lb. .10 - —
Quercetin, fib dms. kilo lots kilo.26.40 - —
Quicksilver (see Mercury metal)
Quince seed, bgs ..... lb. 1.15 - 1.50
Quinidine sulfate, USP, cns .. oz. .74½- 77
Quinine, NF, cns., 100-oz lots ... oz. .34 Nom.
Quinine bisulfate, USP, cns .... oz. .27½- .29
Quinine hydrochloride, cns..... oz. .23 - .25
Quinine sulfate, USP, cns..... oz. .24½- .26
Quinoline, dms., c.l., frt. equald lb. .50¾- —
dms., l.c.l., same basis..... lb. .51¼- —
tanks, same basis ..... lb. .50 - —

R

R salt, paste, dms. frt. alld., 100% basis lb. .88 - —
Powd. frt. alld. 100% basis lb. .98 - —
Rapeseed oil, dms ..... lb. .13¼- .15½
tanks ..... lb. .13¼- —
Rare earth oxalate, 45-50%, bgs., works lb 1.00 - —
Rauwolfia serpentina root, powd., bbls.. dms lb. 1.00 - 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid)

Red Pigments

Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).
Reserpine, cryst., bots ..... gram. 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt. equald. lb. .77½- —
dms., l.c.l., same basis ..... lb. .78½- —
USP, cryst.. dms.. works..... lb. 2.75 - —
powd., dms., works ..... lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs. ..... lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs lb. 6.00 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans..... lb.42.00 -51.00
Synthetic ..... lb.14.00 -16.00
Rhubarb root, India, whole, bgs.. lb. .25 - —
powd., bgs. ..... lb. .35 - —
Riboflavin, USP, fib. dms., kilo or more, dlvd..kilo.36.00 - —
USP, readily soluble, bots., dlvd. kilo.130.00 - —
Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more dlvd. kilo.104.50 - —
Rice bran oil, clarified, dms., l.c.l. lb. .15½- —
tanks, dlvd. E ..... lb. .13½- —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots oz.72.00 - —
Turkish, bots. ..... oz.55.00 -58.00
Rosemary oil, Spanish, NF, cns., dms. lb. .97 - 1.20
tech., cns., dms. ..... lb. .50 - 1.20
Rosin, gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works, unit-lb. .12 - —
Resin, 25-45%, fib. dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots same basis .... lb. .04¼- —
Rubber solvent, petroleum, tanks, Calif. ex tax, San Francisco gal. .178 - —
tanks, east coast, N. J., N. Y. gal. .19 - —
tanks, group 3 ..... gal. .13875- —
Rue oil, bots. ..... lb. 2.75 - 3.00
Rutin, NF, fib. dms., 10 kilo lots kilo.13.75 - —
fib. dms., 5 kilo lots..... kilo14.00 - —
fib. dms., 1 kilo ..... kilo.14.50 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis .... lb. .24 - —

S

S acid, bbls., works ..... lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib dms., 1,000-lb. lots, works lb. 2.50 - —
USP, gran., soluble, dms., 1,000-lb. lots lb. 1.60 - —
dms. smaller lots lb. 1.70 - 1.80
USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.65 - —
dms., smaller lots..... lb. 1.75 - 1.95
Safflower oil, dms., New York. lb. .1785- .1825
tanks, Atl. Coast..... lb. .1585- —
Saffron, Mancha Superior, tins. lb.25.00 - —
Safrol, dms. ..... lb. .70 - —
Sage, Dalmatian, bgs. ..... lb. .40 - —
Greek, cns. ..... lb. .16 - —
Italian, cns. ..... lb. .18 - —
Sage oil, clary, bots. ..... lb.25.00 -32.00
Dalmatian, cns. ..... lb. 3.60 - 4.00
Spanish, cns. ..... lb. 1.35 - 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt. equald lb. 1.23 - —
dms., l.c.l., same basis ..... lb. 1.25 - —
Salicylamide, 100-lb. dms. ..... lb. 1.05 - —
Salicylic acid, crude, fib. dms., c.l., t.l., frt. alld lb. .37¼- —
fib. dms., l.c.l., frt. alld. on 100 lbs. or more lb. .38¼- —
Sublimed, tech., fib. dms., c.l., t.l., dlvd lb. .39¼- —
fib. dms., l.c.l., dlvd. ..... lb. .43¼- —
USP, cryst., 200-lb. fib. dms., 1,000-lbs. or more..... lb. .50½- —
200-lb. fib. dms., less than 1,000 lbs. lb. .53½- —
100-lb. fib. dms., 1,000-lbs. or more lb. .52½- —
100-lb. fib. dms., less than 1,000 lbs. lb. .55½- —
powd., 100-lb. fib. dms., 1,000-lbs. or more lb. .57½- —
100-lb. fib. dms., less than 1,000 lbs..lb. .60½- —

Salol, NF, gran., bbls., kgs. ..... lb. 1.20 - —
Powdered salol, 25c per lb. higher
Salt, rock, paper bgs., c.l., 100 lbs. 1.09 - —
Salt, table vacuum, common, fine, paper bgs., c.l ...100 lbs. 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4, basis ton.28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian, chips, bgs. lb. .65 - .66
powd., fib. dms. ..... lb. .75 - .76
Sandalwood oil, cns..... lb.14.50 -16.50
Sarcosine, tech., tanks, f.o.b., works, frt. equald lb. 1.03 - —
Sardine oil, crude, tanks, Pac. coast. lb. No stocks
Sassafras oil, artif., dms. ..... lb. .40 - .78
Nat., dom., dms. ..... lb. 1.55 - 2.15
Savin oil, USP, cns..... lb. 4.50 - 5.25
Savory oil, cns ..... lb. 4.75 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .85 - —
Powd., bgs., frt. alld., 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots oz.13.00 - —
Sebacic acid, CP, bgs., c.l., works. lb. .69½- —
bgs., l.c.l., works ..... lb. .71½- —
Purified, bgs., c.l., works..... lb. .65½- —
bgs., l.c.l., works ..... lb. .67½- —
Seidlitz mixture, fib. dms. 5,000-lb. lots lb. .30½- —
fib. dms., smaller lots..... lb. .31 - .32
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 - —
Senega root, bls. ..... lb. 3.00 - —
Senna leaves, Alexandria, whole and half, bls lb. .22 - —
siftings ..... lb. .18 - —
Tinnevelly, No. 1, bls..... lb. .22 - —
No. 2, bls. ..... lb. .18 - —
No. 3, bls. ..... lb. .14 - —
pods, bls. ..... lb. .28 - —
powd., bbls., bxs. ..... lb. .17 - —
Serpentaria root, bls. ..... lb. 5.00 - 5.50
Sesame oil, USP, dms. ..... lb .38 - .39
Sesame seed, Columbian, bgs. ... lb. .15¼- —
Lebanese, hulled, bgs. ..... lb. .19 - —
Nicaraguan, hulled, bgs..... lb. .21½- —
nat., bgs. ..... lb. .14 - —
Salvadorian, nat., bgs..... lb. .13 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .46 - —
bbls., 1,500-lb. lots ..... lb. .47 - —
kgs., 1,500-lb. lots..... lb. .48 - —
Bonedry shellac prices for less than 1,500-lb lots 1c. per lb. higher for all packages.
Shellac, bleached, refd., bgs., 1,500-lb. lots ..... lb. .56 - —
bbls., 1,500-lb. lots ..... lb. .57 - —
kgs., 1,500-lb. lots..... lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .36 - .39
lemon No. 2, bgs., 10-bg. lots lb. .33 - .37
superfine, bgs., 10-bg. lots lb. .32 - .34
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works. gal. .37 - —
dms., l.c.l., works ..... gal. .48 - —
tanks, works ..... gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., l.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., l.c.l., works lb. .07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton.25.00 —
bgs., l.c.l., works, ex whse ton.45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton.20.00 - —
bgs, l.c.l., works ton.25.00 - —
99½%, 140 mesh, bgs., c.l., works ton.15.00 - —
bgs., l.c.l., works ton.20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
dms., l.c.l., works ..... lb. 22 - .30½
tanks, works ..... lb. .17 —
Silver bullion, ingots, cs Troy oz. .91⅜- —
Silver cyanide, bots., 1,000-oz. lots, oz. .94¾- —
bots., 500-oz. lots..... oz. .95¼- —
bots., 100-oz. lots..... oz. .96¼- —
Silver nitrate, CP, cryst., bots., 3,000-oz. lots oz. .67¼- —
dms., 1,000-oz. lots..... oz. .67¾- —
bots., 250-500-oz. lots..... oz. .68¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
Strong, NF, bots., dms., 1,000-oz. lots oz. 1.10 - —
Snakeroot oil, Canada, cns. ....lb.45.00 -60.00

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CHEMICALS and METALS

RARE EARTH SALTS

from our general production process, supplied as oxides, fluorides, chlorides and other compounds

GADOLINIUM SALTS
SAMARIUM-GADOLINIUM CONCENTRATES
SAMARIUM SALTS
NEODYMIUM SALTS
THORIUM SALTS
YTTRIUM CONCENTRATES
RARE EARTH SALTS, technical
CERIUM SALTS
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CEROX®—(Optical Grade Cerium Oxide) for glass and granite polishing
DIDYMIUM SALTS—(All the Rare Earths except Cerium)

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LANTHANUM — EUROPIUM — ERBIUM
CERIUM — GADOLINIUM — THULIUM
PRASEODYMIUM — TERBIUM — YTTERBIUM
NEODYMIUM — DYSPROSIUM — LUTETIUM

HIGH PURITY RARE EARTH METALS

YTTRIUM — NEODYMIUM — TERBIUM
LANTHANUM — SAMARIUM — DYSPROSIUM
CERIUM — YTTERBIUM — THORIUM
PRASEODYMIUM — EUROPIUM — HOLMIUM
THULIUM — GADOLINIUM — ERBIUM
LUTETIUM

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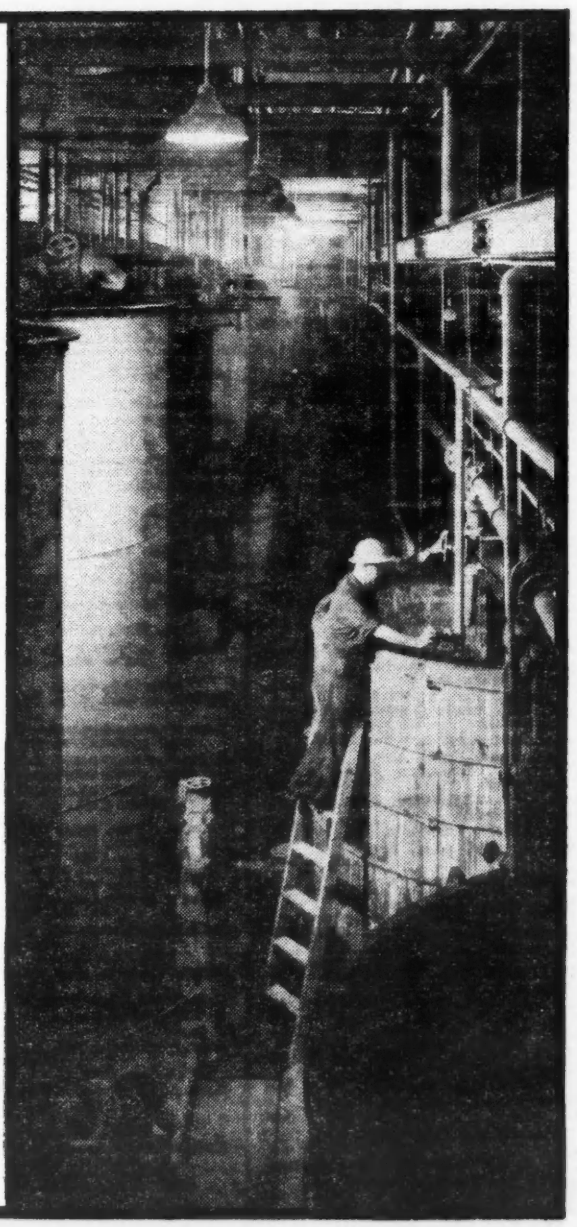

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Soapbark, crushed, bls.....lb. .30 - .35
Powd., bls. .....lb. .35 - .40
Whole, bls. .....lb. .20 - .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs 1.90 - —
paper bgs., l.c.l., stock pts., 100-lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq., 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00
73% sellers' tanks, works, dry basis 100 lbs. 3.00 - —
liq., 73%, rayon type, sellers' tanks, works, dry basis.100 lbs. 3.00 - 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.80 - —
Soda, sal, conc., bgs., c.l., works, 100 lbs. 2.50 - —
bgs., smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
NF, 60%, gran., dms. c.l., works. lb. .15½- —
dms., l.c.l., works .....lb. .17½- —
Sodium alginate, NF, white powd., dom., 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more frt. adjusted lb. 1.90 - —
Sodium antimoniate, bgs., c.l., dlvd. E lb. .25½- —
bgs., l.c.l., dlvd. E .....lb. .27 - —
Sodium arsenate, 60% arsenic pentoxide, dealers, dms., ton or more, works lb. .26 - —
dms. less than ton lots, works lb. .26½- —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more, works lb. .17½- —
dms., less than ton lots, works lb. .18 - .19
Sodium ascorbate, dms. 25-50 kilo dms., f.o.b. works kilo.10.00 - —
10-kilo dm., same basis.....kilo.10.35 - —
5-kilo dm., same basis.....kilo.10.75 - —
1-kilo bot., same basis.....kilo.11.00 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., l.c.l., same basis lb. .39 - —
USP, dms., c.l., t.l. frt. alld lb. .38 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb. lots, same basis, lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs. l.c.l., works 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works. 100 lbs 2.55 - —
bgs., l.c.l., works .... 100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l. t.l., works lb. .13 - —
bgs., l.c.l., works .....lb. .13½- .14¾
Sodium bichromate in dms. ¾c. per lb. higher
Sodium bifluoride, bbls., c.l., works, frt. equald lb. .19½- —
bbls., l.c.l., same basis.....lb. .2025- —
Sodium bisulfate, bulk, c.l., works 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
dms., l.c.l., frt. equald 100 lbs. 3.50 - 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., l.c.l., works 100 lbs. 5.45 - —
Soln., 35° bbls., c.l., works 100 lbs. 1.70 - —
bbls., l.c.l., works 100 lbs. 2.20 - —
Sodium borate (see Borax)
Sodium borohydride, powd., dms., works lb.33.00 -40.00
Stabilized water soln., 12% $NaBH_4$, 100% basis, dms., works lb.15.00 - —
Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.
Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal)
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs., l.c.l., works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., l.c.l., works lb .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb .05 - —
Sodium chlorite, tech., ums., c.l., works lb. .58 - —
dms., 20-dm. lots or more, works. lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms., l.c.l. works lb. .28 - —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works lb .14¾- —
fib. dms. l.c.l., works lb. .15¼- .16½
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs., l.c.l. lb. .1065- .1190
Sodium citrate, anhyd., 200-lb. dm., f.o.b. works E lb. .62 - —
NF VIII, gran., bgs., c.l., same basis lb. .26 - —
USP, XIV, gran., bgs., c.l., same basis lb. .29 - —
Sodium citrate, USP powd prices ½c. higher.
Sodium cyanate, dms., 1,000-lb lots, works lb. .85 - —
dms., smaller lots, works lb. .90 1.10
Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots lb. .193 - —
dms. over 1,000-lb lots lb. .203 - —
dms., 100-lb to 1,000-lb lots lb. .213 - —
Gran sodium cyanide 1c higher
Sodium cyclamate, 100-lb. dm., f.o.b. works lb. 1.95 - —
Sodium diacetate anhyd., 39-41% acetic acid, 250-lb. dms., c.l., works lb. .18 - —
250-lb. dms., l.c.l., works lb. .18¾- —
Sodium diacetate, tech., 33-35% acetic acid, dms. l.c.l., works lb. .15 - —
250-lb. dms., l.c.l., works lb. .15¾- —
Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l., frt. alld., 100% basis lb. .42 - —
dms., l.c.l., t.l., same basis lb. .47 - .52
tanks, same basis lb. .38 - —

Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs., smaller lots lb. .14¾- —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms., l.c.l., works, frt equald lb. .1465- —
Sodium formate, bgs., c.l., works. 100 lbs. 7.05 - —
bgs., l.c.l., ex whse. 100 lbs 8.65 - —
Sodium gentisate, 100-lb fib. dms.lb 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .84 - —
Tech., bgs., c.l., t.l., same basis lb. .34 - —
Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 - 2.50
25% soln. in oil, dms., 50 lbs or less, f.o.b. shipping point lb. 2.20 - —
dms., 50-99 lbs., same basis lb. 1.77 - —
dms., 100-999 lbs., same basis.lb. 1.20 - —
dms., 1,000 lbs. or more, same basis lb. .95 - —
Sodium hydrosulfide (see Sodium sulfhydrate)
Sodium hydrosulfite, dms. c.l., frt. alld lb. .22½- —
dms. l.c.l. frt alld. lb. .24¾- —
Sodium hydroxide, NF pellets, 100-lb dms., 1 to 100-dm lots. lb. .23½- .28
Sodium hydroxide, tech (see Soda, caustic)
Sodium hypophosphite, NF, dms., 1,000-lb lots lb. .97 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dm., f.o.b. works lb. 1.98 - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., l.t.l., dlvd lb. .21½- —
tanks, dlvd. lb. .19½- —
Sodium metabisulfite (see Sodium bisulfite).
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 - 6.50
l.c.l., bgs., works 100 lbs 4.40 - 7.00
Sodium metaborate octahydrate, gran. bgs. c.l. works.ton.102.00 - —
bgs., ton lots, ex whse 100 lbs. 8.00 - —
bgs., smaller lots ex whse. 100 lbs. 9.25 -11.25
Sodium metaborate tetrahydrate, bgs., c.l. works ton.210.00 - —
bgs., ton lots, ex whse 100 lbs.13.93 - —
bgs., smaller lots, ex whse. 100 lbs.15.18 -17.18
Sodium metallic, bricks, c.l. works, lb. .21 - —
Fused, 18,000-lb lots or more, works lb. .19½- —
tanks, works lb. .17 - —
Sodium metalinate, bbls., frt. alld. lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt. 100 lbs.11.10 - —
bgs., l.c.l., same basis. 100 lbs.11.85 - —
dms., c.l., same basis. 100 lbs.11.70 - —
dms., l.c.l., same basis. 100 lbs.12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb lots, works. 100 lbs. 6.05 - —
dms., c.l., works 100 lbs 6.20 - —
dms., l.c.l., works 100 lbs 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs. 4.45 - —
bgs., l.c.l., works 100 lbs. 4.80 - 6.75
dms., c.l., works 100 lbs. 4.95 - —
dms., l.c.l., works 100 lbs. 5.30 - 7.25
Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 - .99
Cryst., dms., works, frt. alld lb. .74 - .76
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls., lb. .70 - —
Sodium nitrate, dom. crude, bgs., c.l., works. ton.48.00 - —
bulk, c.l., works ton.44.00 - —
Imp., 100-lb. bgs., c.l., Atl., Gulf, Pac., whse. ton.48.00 - —
bulk, c.l., same basis ton.44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.00 - —
bbls., l.c.l., same basis 100 lbs.11.00 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65
Sodium orthosilicate, hydrated, flake, bbls., c.l., works, 100 lbs. 5.65 - —
bbls, l.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 88%, bgs., works. 100 lbs.12.35 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms., l.c.l., same basis lb. .26½- .33
Sodium pentobarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs., l.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —
Sodium phenolsulfonate, USP, IX, gran., dms lb. .52 - .53
NF, powd., dms lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 7.95 - —
bgs., l.c.l., same basis 100 lbs. 8.35 - 9.40
Sodium phosphate, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., same basis 100 lbs. 8.10 - —
USP, dried, powd., bgs., dms., works lb. .19 - .20½
Sodium phosphate, monobasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 9.00 - —
bgs., l.c.l., same basis 100 lbs. 9.40 -10.00
Sodium phosphate, tribasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 9.05 - —
bgs., l.c.l. frt. equald.100 lbs. 9.45 -10.05
cryst., bgs., c.l., t.l., frt. equald. 100 lbs 4.60 - —
bgs., l.c.l., frt equald 100 lbs. 5.00 - 5.75
Sodium phosphate in dms. 60c to 80c higher than bgs.
Sodium picramate, tech., paste, dms., f.o.b., works, frt. equald lb. .90 - —
Sodium prussiate, yellow (see Sodium ferrocyanide).
Sodium pyrophosphate acid, bgs., c.l., works, frt equald. 100 lbs.11.10 - —
bgs., l.c.l., same basis 100 lbs.11.85 -12.35

Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works lb. .37 - .39
Sodium pyrophosphate, tetrabasic, anhyd., bgs., c.l., works, frt equald 100 lbs. 7.81 - —
bgs., l.c.l., same basis 100 lbs. 9.21 - 9.71
Sodium salicylate, USP, dms., 1,000-lbs. or more lb. .78½- —
dms., less than 1,000 lbs dms.lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs 2.35 - —
bgs., l.c.l., dlvd. zone 1 100 lbs 4.10 - 4.35
dlvd. zone 2 100 lbs 4.35 - 4.60
dlvd. zone 3 100 lbs 4.75 - 4.90
dlvd. zone 4 100 lbs 5.35 - 5.60
Sales zones are: (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss., south of 31°; Tex. E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn. Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo and El Paso, Tex.
Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs. 5.70 - —
dms., c.l., t.l., works 100 lbs 6.20 - —
Hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works. 100 lbs. 5.35 - —
Sodium sesquisilicate, hydrated, dms., c.l., works 100 lbs. 5.50 - —
dms., 6,000-19,900 lb lots, works. 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be, turbid, 1:3.2, dms., c.l. works. 100 lbs. 1.55 - —
dms., l.c.l., works 100 lbs. 1.90 - 2.40
tanks, works 100 lbs. 1.20 - —
47° Be., turbid, 1:29.9, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l. works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —
52° Be. turbid, 1:2.4, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1:3.2, bgs., works ton.67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .725 - —
Sodium silicofluoride in dms., 0.4c. per lb. higher.
Sodium stannate, dms., works, frt. alld. E lb. .642 - .702
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., dlvd. E ton.54.00 - —
detergent, rayon grade, bgs., c.l., works ton.36.00 - —
bulk, c.l., works ton.32.00 - —
USP, cryst., fib dms. lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works frt. equald. lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis ton.130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., l.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., bgs., c.l. works 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 7.95 - —
Tech., bgs., c.l., works 100 lbs 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40% dms., c.l., works, frt. equald lb. .04½- —
dms., l.c.l., same basis lb. .05½- —
Sodium thiocyanate, CP, dms lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate, NF, cryst. bbls. lb. .13½- —
Sodium thiosulfate, tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald. 100 lbs. 7.75 - —
100-lb. bgs., l.c.l., t.l.l., frt. equald. 100 lbs. 8.15 - —
Sodium thiosulfate, tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald. lb. .0775- —
64-lb. bgs., l.c.l., t.l.l., frt. equald. lb. .0815- —
Sodium thiosulfate, tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald. 100 lbs. 4.95 - —
100-lb. bgs., l.c.l., t.l.l., frt. equald. 100 lbs. 5.20 - —
Sodium titanate, ctns., c.l., works. lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton or less, works lb. .14¾- —
Sodium trichloroacetate, 94%, 100-lb. dms., c.l., frt. alld. E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb. cns., c.l., frt. alld. E. lb. .42 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt equald 100 lbs. 8.16 - —
bgs., l.c.l., same basis 100 lbs. 8.56 - 9.06
Sodium trisilicate, powd., 1:3.2 bgs., c.l., works 100 lbs. 8.95 - —
bgs., l.c.l., works 100 lbs. 9.70 -13.13
dms., c.l., works 100 lbs. 9.45 - —
dms., l.c.l., works 100 lbs.10.20 -10.60
Sodium tungstate, tech. kgs. dlvd. E lb. 1.09 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., same basis lb. .21½- —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib., dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt. equald gal. .30 - .35½
Solvent naphtha, petroleum, aromatic 312°-365°F. b.r., 17.2°C. m.a.p., tanks, New Jersey gal. .31 - —
315°-350°F. b.r., 17.2°C. m.a.p., tanks, Texas City gal. .35 - —
342°-351°F. b.r., 15°C. m.a.p., tanks, Baytown, Texas gal. .29 - —
324°-349°F. b.r., 16.5°C. m.a.p., tanks, Houston gal. .32 - —
322°-350°F. b.r., 17.2°C. m.a.p., tanks, Baytown, Tex. gal. .29 - —
352°-413°F. b.r., 17.5°C, m.a.p., tanks, Houston gal. .32 - —
365°-404°F. b.r., 19°C, m.a.p., tanks, New Jersey....gal. .32 - —

Sodium naphtha, petroleum, aromatic, 367°-421°F. b.r., 20°C, m.a.p., tanks, Baytown, Tex. gal. .30 - —
205°-282°F. b.r., 28°C, m.a.p., tanks, New Jersey gal. .24 - —
211°-277°F. b.r., 25.6°C, m.a.p., tanks, New York, New Jersey gal. .26 - —
221°-278°F. b.r., 34.8°C, m.a.p., tanks, Houston gal. .20 - —
Solvent naphtha, petroleum, partial aromatic, 282°-325°F. b.r., 41.6°C, m.a.p., tanks, Houston gal. .25 - —
357°-403°F. b.r., 34°C, m.a.p., tanks, Houston gal. .26 - —
358°-401°F. b.r., 24.4°C, m.a.p., tanks, New Jersey gal. .38 - —
Sorbitan monostearate, tib. dms., 20,000-lb. lots, works lb. .33 - —
fib dms., 10,000 to 20,000-lb. lots, works lb. .35 - —
fib. dms., smaller lots, works lb. .38 - .40
Sorbitan tristearate, fib. dms., 20,000-lb lots works lb. .34 - —
fib dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works. lb. .25 - .26
Powd., dms., c.l., works lb. .36 - —
dms., 1 to 5-ton lots, works. lb. .38 - .39
Soln., coml., aqueous, dms., c.l., works lb. .24¼- —
dms., ton lots, works lb. .25 - —
dms., smaller lots, works lb. .25¼- —
tanks, works lb. .23¼- —
NF, reg., 70% aqueous, dms., c.l., works lb. .16 - —
dms., ton lots, works lb. .16¾- —
dms., smaller lots, works lb. .17 - —
tanks, works lb. .15 - —
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 - —
bgs., l.c.l., works lb. .23½- —
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20½- —
Soybean meal, 44%, bulk, Decatur. ton.53.00 - —
Soybean oil, crude, tanks, Decatur. lb. .09¼- —
Foots, soapstock, acid 95%, tanks. lb. .07 - —
Refd., alkali, dms. lb. .1355- .1380
tanks lb. .1155- —
Clarified, dms. lb. .1305- .1330
tanks lb. .1105 - —
Salad, dms. lb. .13½- .13¾
tanks lb. .11½- —
Soybean oil acids, dbl. dist., dms., lb. .18 - .20¼
tanks lb. .15½- —
S. D., dms lb. .16¾- .19¼
tanks lb. .14¼- —
Sparteine sulfate, cns. oz. .80 - —
Spearmint leaves, dom., bls. lb .75 - —
Spearmint oil, NF, dms. lb. 4.85 - 5.85
Sperm oil, bleached, winter, 45° dms. lb. .1450- .1550
tanks lb. .1250- —
Nat., winter, 45°, dms. lb. .1350- .1450
tanks lb. .1150- —
Spermaceti wax, blocks, cs. lb. .31 - .34
Cakes, cs. lb. .32 - .34
Spruce oil cns., dms. lb. 2.10 - 3.55
Squill, white, bls lb. .16 - .18
powd., bbls., bxs lb. .17 - .20
St. John's bread, edible, bls. lb. .17 - —
Stannic chloride, anhyd., dms., works lb. .812 - .834
Stannic oxide, dms., dlvd. lb. 1.10 - 1.11
Stannous chloride, anhyd. dms., works lb. 1.007 - 1.262
Stannous chloride, hydrous, cryst., works lb. .87 - .88
Stannous sulfate, dms., works lb. 1.062 - 1.102
Star root (see Helonias root).
Stargrass root (see Aletris root).
Stavesacre seed, bgs. lb. .60 - .61
Stearic acid, dbl., pressed bgs. lb. .16¼- .18¾
Single-pressed bgs. lb. .15¾- .18¼
Triple-pressed, bgs. lb. .18 - .20½
Stearine, oleo (see Oleostearine)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, western Pennsylvania, gal. .16 - —
tanks, group 3 gal. .12875- —
tankwagon, Boston gal. .20 - —
Chicago gal. .299 - —
Cleveland gal. .23½- —
Los Angeles, ex tax gal. .199 - —
tankwagon, Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Stramonium leaves, bgs lb. .15 - —
Streptomycin hydrochloride, bulk, gram. .037 - .038
Streptomycin sulfate, bulk gram. .037 - .038
Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E lb. .92 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works. lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate fib. dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb. lots. lb. 3.57 - —
Strontium nitrate, bgs., c.l., works. 100 lbs.11.00 - —
bgs., l.c.l., works 100 lbs.12.00 - —
Strontium salicylate, NF, dms. lb. 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works ton.56.70 -66.15
Strophanthin G (see Ouabain, USP).
Strophanthin K, bots. oz.25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75
Styrax gum, USP, cs lb. 4.50 - 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., frt. alld. lb. .17 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .14½- —
Styrene monomer, tech., 99.2%, dms., c.l. lb. .1453- —
dms., l.c.l., same basis lb. .1653- —
tanks, bulk, same basis lb. .1203- —

Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.

Styrolyl acetate, bots. lb. 1.25 - 1.45
Succinic acid, purif., cryst., bbls., works lb. .62 - .75
Sucrose, refd., white, bgs., refy. E. lb. .0935- —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works lb. 1.00 - —
Sugar (see Sucrose)
Sugar cane wax, dom., refd., slabs, 80-lb. ctns. works lb. .60 - .65
80-lb. ctns., spot lb. .65 - .75
Sulfabenzamide, dms. kilo. 8.80 - 9.90
Sulfabenzamide-sodium, dms. kilo. 9.00 -10.10
Sulfacetamide, USP, fib. dms. kilo. 6.61 - 6.83
Sulfacetamide-sodium, USP, fib. dms kilo. 8.15 - 9.28

Sulfadiazine, USP, microcrystals, dms kilo.23.35 -24.45
USP, powd., dms. kilo.22.60 -23.70
Sulfadiazine-sodium, USP, dms kilo.24.80 25.90
Sulfaguanidine, NF X, dms kilo 5.50 6.60
dms kilo.23.50 -24.60
Sulfamerazine-sodium, USP, powd., dms kilo.24.80 -25.90
Sulfamethazine, USP XV, microcrystals, dms kilo.19.65 -20.75
USP XV, powd., dms kilo.18.75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs.16.00 —
dms., l.c.l., l.t.l., works 100 lbs.17.50 -18.50
Gran., dms. c.l., t.l., works. 100 lbs.14.75 - —
dms., l.c.l., l.t.l., works 100 lbs.16.25 -17.25
Sulfanilamide, NF X, 30-80 mesh, dms kilo 3.05 3.50
NF X, microcrystals, dms. kilo 3.79 4.20
NF X, powd., dms. kilo 2.85 - 3.30
Sulfanilamide quinoxaline, veterinary, dms kilo.16.28 - —
Sulfanilic acid, tech., dms., c.l., frt. alld lb. .21 - —
dms., l.c.l., frt. alld. lb. .23 - —
Sulfapyridine, USP XV, powd., bots. tins kilo.15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo.16.55 -17.65
Sulfathiazole, NF X, powd., dms. kilo. 5.50 5.85
NF X, microcrystals, dms kilo. 6.25 - 6.60
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 - —
Sulfur, coml., flour, bgs., mines, 100 lbs. 2.35 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs. 2.25 - —
bbls., mines 100 lbs. 2.80 - —
Sulfur, crude, dom., bright, bulk, f.o.b cars, mines long-ton.23.50 - —
Export, f.o.b. vessels Gulf ports long-ton.25.00 - —
US and Canada f.o.b vessels Gulf ports. long-ton.25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, bulk, imp., Mexican, filtered, f.o.b., vessel, Coatzacoalcos long-ton.24.00 - —
Mexican dark sulfur price is $1 per long-ton lower.
Sulfur, refd. flowers, NF, bgs., mines 100 lbs. 5.15 - —
bbls., mines 100 lbs. 6.50 - —
flour, light, bgs., mines 100 lbs. 4.75 - —
bbls. mines 100 lbs. 5.75 - —
lump bgs., mines 100 lbs. 4.45 - —
rolls, bgs., mines 100 lbs. 5.00 - —
bbls., mines 100 lbs. 5.75 - —
salt block, bgs., mines 100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs. 4.70 - —
Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs. 2.45 - —
bbls., mines 100 lbs. 3.70 - —
98-100%, passing through 325 mesh, bgs., mines 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.80 - —
refd., bgs., mines 100 lbs. 4.40 - —
bbls., mines 100 lbs. 5.55 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 4.00 - —
Sulfur dichloride, ret. dms. c.l., works, frt. equald lb. .04½- —
ret. dms., t.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
Sulfur dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .12
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
Sulfur dioxide, refrigeration, 150-lb. cyls., dlvd. lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .04½- —
dms., t.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., t.c.l., works 100 lbs. 2.30 - —
tanks, works ton.18.60 - —
66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., t.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton.22.35 - —
98%, tanks, works ton.23.50 - —
99%, tanks, works ton.23.70 - —
100%, tanks, works ton.23.95 - —
CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾- —
Sulfuric acid, consumers' cbys., t.c.l., same basis lb. .14¼- .14¾
5-pt. bots., extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots., extra, cs., t.c.l., same basis lb. .17¾- .18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton.25.00 - —
40%, tanks, works ton.29.00 - —
65%, tanks, works ton.39.50 - —
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk., c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
bulk, f.o.b. vessel unit-ton. 1.02 - —
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla unit-ton. .98 - —
Sweet birch oil, USP, northern, cns lb. 4.00 - 9.50
USP, southern, cns. lb. 2.00 - 3.05

T

2,4,5-T, dms., c.l., works frt. equald. lb. 1.18 - —
dms., t.c.l., same basis lb. 1.25 - —
2,4,5-T isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., t.c.l., works lb. 1.29 - —
Talc, dom., fibrous, New York, grd., bgs., c.l., works ton.28.00 - —
bgs., t.c.l., works ton.31.00 -36.00
fibrous, New York, 99.5%, 325 mesh bgs., c.l., works. ton.31.00 - —
bgs., t.c.l., works ton.34.00 - —
fibrous, 99.95%, 400 mesh, micronized bgs., c.l., works. ton.38.00 - —
625 mesh, micronized, bgs., c.l., works ton.80.00 - —
ord., Calif., gran., bgs., c.l., works ton.34.00 -39.50
Vermont, off-color, grd., bgs., c.l., works ton.19.40 - —
bgs., t.c.l., works ton.37.00 - —
Imp., Canadian grd., bgs., c.l., mines ton.20.00 -35.00
Tall oil, crude, dms. c.l., works lb. .04¼- .04½
tanks, works lb. .02¾- .03
Dist., dms., c.l., works lb. .07¾- —
dms., t.c.l., works lb. .08 - .08½
tanks, works lb. .06 - .06½
Refd., dms., c.l., works lb. .06¾- —
dms., t.c.l., works lb. .07 - .07½
tanks, works lb. .05½- .06

Tall oil acids, dms., c.l., works lb. .09 - .12
dms., t.c.l. lb. .09½- .12½
tanks, works lb. .07¼- .10
Tallow, edible, tanks, dlvd. lb. .08 - .08⅛
inedible, fancy, bleachable, tanks. lb. .06⅜- .06½
fancy, guaranteed, dms., f.a.s. lb. .08 - .08⅛
No. 1, tanks, dlvd. lb. .05⅝- .05¾
prime, tanks, dlvd lb. .06⅛- .06¼
special tanks, dlvd lb. .06 - .06⅛
sulfonated 25% bbls., l.c.l. lb. .08⅜- .08⅞
50%, bbls., l.c.l lb. .10½- .11
Tallow acids, dist., dms. lb. .14¼- .16¾
tanks lb. .11¾- —
Hydrogenated, dms. lb. .15¾- .18¼
Tallow oil, acidless, dms., c.l. lb. .14½ - —
dms., t.c.l. lb. .15½- .17
Tangerine oil, Florida, dms. lb. 3.10 - 4.00
Tankage, animal, feeding, 9-11% ammonia New York bulk unit-ton. 5.00 - —
Animal, feeding, 9-11% ammonia Chicago, bulk unit-ton. 5.50 - —
Tannic acid, NF, fluffy bbls. 1,000-lb lots lb 2.05 - —
bbls., smaller lots lb. 2.06 - 2.07
Tannic acid, NF, powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb. 1.96 - 1.99
Tech., dms. lb. 1.05 - —
Tansy oil, dms. lb. 7.25 - 7.50
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .53½- —
dms., t.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
25-28%, dms., c.l., same basis gal. .60 - —
dms., t.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., t.c.l., same basis gal. .77 - —
tanks, same basis gal. .63 - —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate)
Tartaric acid, NF, 100-lb. bgs., c.l., frt. equald lb. .41 - —
bgs., 10,000 lbs., 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb fib. dms lb. .70 - —
Terpineol, extra, dms. lb. .50 - .60
Prime, dms. lb. .40 - .50
Terpinyl acetate, extra, cns., dms. lb. .64 - .75
Prime, dms. lb. .53 - .56
Terpinyl propionate, dms. lb. 1.75 - 3.00
Terra alba (see Gypsum).
Testosterone, USP, bots. gram. No prices.
Testosterone proprionate, USP. gram. No prices.
Tetrachloroethane, dms. works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., t.c.l., works lb. .22 - .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .60 - —
dms., t.c.l., dlvd. E. lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine dms., c.l., dlvd E lb. 53½- —
dms., t.c.l., dlvd. E. lb. .55 - —
tanks, dlvd E lb 51 - —
Tetraethylthiuram disulfide, tech., dms., frt alld lb 1.04 - —
Tetrahydrofuran, dms. c.l., t.l., works lb 36½- —
dms., t.c.l., or l.t.l., works lb. 37 - —
tanks, works lb. 35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31½- —
dms., t.c.l., Memphis, Tenn lb. .32½- —
dms., c.l., t.l., Newark, N.J lb. .33½- —
dms., t.c.l., Newark, N J lb. .34½- —
tanks, dlvd E. of Denver lb. .31 - —
tanks, dlvd. W. of Denver lb. .32 - —
Tetrapotassium phosphate (see potassium phosphate).
Thallium metal dlvd lb 7.50 -10.00
Thallium sulfate, 99% bots., dlvd. lb 5.00 -10.00
Theobromine, NF, fib. dms lb 4.50 —
Theobromine and sodium acetate, USP, fib dms lb 4.75 - —
Theobromine sodio-salicylate, NF, fib dms lb. 3.90 - —
Theophyline, USP, anhyd., 100-lb. dms., frt. alld lb. 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt. alld kilo.36.00 - —
USP, ampule grade, fib. dms., frt. alld kilo.38.00 - —
Thiamine mononitrate, USP, fib. dms., frt. alld kilo.36.00 - —

Regular sodium metasilicate pentahydrate.

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Rounder, smoother granules
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Thiocarbanilide, dms., ton lots lb. .72 - —
dms., less ton lots lb. .74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.20 - —
Tungstated, PTMA, kgs., works. lb. 6.20 - —
Thioglycolic acid, refd., cbys., 100% basis lb 1.35 - 1.55
Thiosalicylic acid, purif., dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech., bgs., t.l., frt. alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib dms., 100-lb. lots or more, works lb 3.50 - —
dl-Threonine, bots., 1-kilo lots kilo 275.00 - —
Thyme leaves, French, bgs. lb. .29 - —
Spanish, bgs. lb. .14 - —
Thyme oil, NF red, cns., dms lb 2.00 2.25
USP, white, cns. lb 2.20 2.60
Tech., white, cns. lb 40 1.85
Thymol, fib dms. lb 2.60 3.00
Thymol iodide, NF, dms. lb. 7.30 —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see stannous chloride, hydrous).
Tin metal (straits) lb. 1.02 - —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd. (see Stannic chloride anhyd.).
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
reg., bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
Titanium dioxide, anatase, metallurgical, nat., bgs., c.l., f.o.b. Jacksonville Fla ton 180.00 - —
bgs., 5-ton lots, Niagara Falls, N.Y ton 205.00 - —
bgs., ton lots, same basis, ton 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium dioxide, rutile, non-chalking, bgs., c.l., dlvd. E lb. .27½- —
bgs., l.c.l., dlvd. E lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09¾- —
bgs., l.c.l., works lb. 09⅞- —
Titanium dioxide-calcium pigment, 50% Ti O_2, high-tinting, dms. c.l. lb. .14⅜- —
dms., l.c.l lb. .14⅞- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. 26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. 20 - —
Tobias acid, dms., c.l., t.l. lb. 78 - —
dms., l.c.l. lb. .81 - —
d-a-Tocopherols, mixed, NF, conc., pure basis, bots kilo. 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo. 109.00 - —
dl-a-Tocopherol, bots kilo. 99.00 - —
dl-a-Tocopheryl acetate bots. kilo. 90.00 - —
25% dry, powd., bots. kilo. 22.50 -24.00
33⅓ dry, powd., bots. kilo. 30.00 -31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 - —
Paste, kgs., 100% basis lb 1.50 - —

Toluol

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis lb. 1.50 - —
Tolu balsam, cns lb. 3.10 - 3.60
Toluene coaltar indust., or nitration, tanks, dlvd E of Rockies gal. .25 - —
Toluene, petroleum indust., tanks, dlvd E. of Rockies gal. .25 - .32
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., l.t.l., same basis lb. .63 - —
Toluenesulfonic acid, dms., c.l., t.l., works lb. .17 - —
dms., l.c.l., works lb. .18 - —
p-Toluenesulfonic acid monohydrate, dms., c.l. or t.l. lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
dms., l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 - —
dms., l.c.l., same basis lb. .31 - —
tanks, same basis lb. .28 - —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 - —
Cast, dms. frt. alld lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs., works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l. frt alld lb 1.10 —
Tonka beans, Angostura, cks. lb. 1.50 - 1.60
Brazilian, Surinam, cs. lb. 1.25 - 1.30
Totaquine 100-oz. lots, cns. oz. .42 —
Toxaphene, dms. c.l. t.l., works. lb 22 —
dms., l.c.l., t.t.l., works lb .28 —
Tragacanth gum, No. 1, ribbons, cs lb. 3.60 - 3.75
No. 2, cs lb. 3.40 - 3.60
No. 3, cs lb. 3.15 - 3.25
USP, powd., bbls. lb. 1.05 - 1.15
Triacetin dms., c.l., dlvd. E of Rockies lb .39 —
dms., l.c.l., same basis lb .40 - —
tanks, same basis lb .37 —
Triallylamine, dms., c.l., dlvd. lb .985 —
dms., l.c.l., dlvd. lb .995 —
tanks, dlvd. lb. .96 —
Tributyl citrate, tech., non-ret dms., c.l., frt alld E of Denver. lb. .42½- —
non-ret. dms., l.c.l. frt alld. E. of Denver lb. .43½- —
tanks, frt. alld E of Denver lb. .40 - —
Tributyl phosphate, dms. c.l. works. lb. .52½- —
dms., l.c.l., same basis. lb. .53½- —
tanks, same basis. lb .50 - —
Tributylamine dms., c.l., works lb .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb 65 —
Trichloroacetic acid, bots. lb. 2.00 2.50
Trichlorobenzene, dms., c.l., frt. alld. E lb. .15 - —
dms., l.c.l., frt. alld. E. lb. .16 - —
tanks, frt. alld. E. lb. 13¼- —
Trichlorobenzene prices in the West 1¾c. higher
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .12¼- —
dms., l.c.l., dlvd. lb. .16¼- —
tanks, dlvd. lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½- —
dms., l.c.l., dlvd. E. lb. .14¼- —
tanks, works lb. .11½- —
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .13 - —
dms., l.c.l., frt. alld. lb .15 - .16¾
tanks, works, frt. equald lb .12 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln. rct chys. works, frt adjusted. lb 1.40 - 1.45
Tricresyl phosphate, coaltar dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. lb. .36 - —
tanks, dlvd. lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd. lb. .34½- —
dms., l.c.l., dlvd. lb. .35½- —
tanks, dlvd. lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .26½- —
dms., l.c.l., dlvd. E lb. .28 - —
tanks, dlvd. E lb. .24 - —
Triethanolamine, dms. c.l. dlvd E. lb. .24½- —
dms., l.c.l., same basis lb. .26 - —
tanks, same basis lb. .22 —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., l.t.l., frt. alld. lb. .26½- —
tanks, frt. alld lb. .24½- —
Triethylamine, dms., c.l., dlvd. E. lb. .50 —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret dms., c.l., frt alld E. of Denver lb. .46¼- —
non-ret. dms., l.c.l., frt alld. E of Denver lb. .47¼- —
tanks, frt. alld. E. of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. lb. .41½- —
tanks, dlvd. lb. .38 - —
Triethylene glycol, dms., c.l. dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd. E. lb. .53 - —
tanks, dlvd E lb. .49 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd E. lb. .24¾- —
tanks, dlvd E lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .305
tanks, same basis lb. .26 - —
25-40% soln., dms., c.l., works, frt equald, 100% basis lb. .35 - —
dms., l.c.l., works, frt equald., 100% basis lb. .35½- —
tanks, works, frt. equald, 100% basis lb. .26 - —
Trimethylol propane, dms., c.l., t.l., dlvd. E lb. .39 - —
dms., l.c.l., l.t.l., same basis lb. .40 - —
Trioxane, pure, dms., c.l., t.l., works. lb. .50 - —
dms., l.c.l., works lb. .51½- —
Tripentaerythritol, c.l., t.l., dlvd. lb. .40 - —
bgs., l.c.l., l.t.l., dlvd. E. lb. .41 - —
Triphenyl phosphate, bbls., c.l., frt equald lb. .41½- —
bbls., l.c.l., frt equald lb. .42½- —
Triphenylguanidine, bbls. works lb. .90 - —
Tripropylene glycol, dms., c.l., t.l., frt. alld E lb. .21 - —
dms., l.c.l., l.t.l., frt. alld. E lb. .22½- —
tankcars and compartmented tankcars, frt. alld. E lb. .18½- —
Tripropylene glycol, tankwagons and compartmented tankwagons, 1,000 gals. min., frt. alld. E lb. .19 - —
Tripropylene glycol prices 1c. per lb. higher in West.
Trisodium phosphate (see Sodium phosphate tribasic)
dl-Tryptophane, fib., dms., works. lb. 55.00 —
Tung oil, dms., c.l., New York lb. .25½- —
dms., l.c.l., New York lb. .25¾- —
tanks, New York lb. .23⅞- .24
tanks, domestic, mills lb. .22⅞- .23
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb 3.54 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
dms., smaller lots, works lb. 2.45 - —
Turkey red, bbls. works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns. oms lb. .28 .50
Tuscan red, bbls. frt. equald lb. .26 .32
Tyrothricin, USP, 1 to 5 kilos gram. .54 - —

the first 99+% purity Terephthalic acid

From years-ahead planning, Oronite announces availability of large scale production of highly pure Terephthalic acid—a chemical intermediate with great growth potential in the fiber and plastics industries.

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Foreign Affiliate: California Chemical International, Inc., San Francisco, Geneva, Panama

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .35 - .39½

Ultramarine blue, jobbing types, bbls., same basis lb. .19 - —

Regular types, dry bbls., same basis lb. .22½- .35

Ultramarine blue prices 1c. higher W of Rockies.

Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾

bgs., l.c.l., works lb. .07¾- .08

Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —

Umber pigment, raw, American, bgs., works lb. .07¾- .08¼

Turkey-type, bgs., works lb. .08½- .08¾

Undecylenic acid, dms lb. 1.28 - —

Unicorn root, false (see Helonias root).

Unicorn root, true (see Aletris root).

Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E ton.125.00 - —

bgs., l.c.l. dlvd E ex whse. ton.145.00 - —

45% N, agricultural, bgs., c.l., (30 tons) dlvd. E ton.103.00 - —

Urea-ammonia liquor, A, B, C & F grades, N basis, tanks, frt. equal ton.120.00 - —

37 grade, tanks, same basis ton.145.00 - —

Urethane, USP, dms., t.l., f.o.b., works lb. .65 - —

dms., l.t.l., same basis lb. 70 - —

Uva-ursi leaves, bls lb. .12 - —

V

Valerian root, Belgian, bgs lb. .32 - —

Indian, bgs. lb. 25 - —

di-Valine dms, works lb. 21.00 - 27.50

Vanadium pentoxide, tech., dms., works lb 1.28 - 1.33

Vandyke brown bbls, works lb 09½ - 12

Vanilla beans, Bourbon, tins lb. 14.50 - 15.00

Mexican, cuts, tins lb. 14.00 - 14.50

whole, tins lb. 14.50 - 15.00

Vanillin ex lignin, 100-lb fib dms., 1,000-lb lots or more lb 3.00 - —

100-lb fib dms., 500-lb lots lb. 3.10 - —

100-lb. fib dms., cns., 100-lb. lots lb. 3.25 - 3.35

Venetian red, jobbing, bgs., works lb. .0475- —

Venetian red, 20%, bgs., works lb. .0525- —

25%, bgs., works lb. .0575- —

30%, bgs., works lb. .06 - —

35%, bgs., works lb. .0625- —

40%, bgs., works lb 0675 — —

Vetiver oil, Bourbon, cns lb. 12.75 - 16.00

Haitian, cns. lb. 12.50 - 15.50

Victoria blue toner, molybdated, PMA, 250-lb bbls., dlvd. E of Rockies lb. 4.50 - —

Tungstated, PTA, 250-lb. bbls., dlvd. E of Rockies lb. 5.55 - —

Victoria blue toner, bbls., prices 1c higher W of Rockies

Vinyl acetate monomer, zone 1, 55-gal dms., c.l., dlvd lb. .20 - —

55-gal. dms., l.c.l., dlvd. lb. .21½- —

tanks, dlvd. lb. .17½- —

tanktrucks less than 4,000 gal., dlvd lb. .18 - —

zone 2, 55-gal. dms., c.l., dlvd lb. .21 - —

55-gal. dms., l.c.l., dlvd. lb. .24 - —

tanks, dlvd. lb. .18½- —

tanktrucks less than 4,000 gals., dlvd lb. .19 - —

zone 1 is all continental US except zone 2. zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash

Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 - —

Vinyl chloride monomer, tanks, works lb. .1162- .125

Vinyl ether USP, anesthesia, bots., 50cc., hospitals bot. 1.12 - —

bots., 75cc., hospitals bot. 1.56 - —

Vinyl ethyl ether tech. dms., c.l., works lb. .29¼- —

dms., l.c.l., works lb. .30 - —

tanks, works lb. .27¼- —

Vinyl propionate monomer, dms., c.l., dlvd lb. .49 - —

dms., l.c.l., same basis lb. .50 - —

tanks, same basis lb. 47 - —

Vinyl trichloride (see Trichloroethane).

2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 - —

1 to 9 dms., works lb. 1.35 - —

tanks, works lb. 1.15 - —

Vinyltoluene, dms., c.l., f.o.b., works. lb. .16½- —

dms., l.c.l., same basis lb. .18½- —

tanks, f.o.b., dest. frt. prepaid lb. .14 - —

Viosterol, in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —

Virginia type red, bbls., works lb. 1.40 - —

Vitamin A acetate, syn., cryst., beads 500,000 A units per gram gram. .07¼- —

Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo 67.50 - —

325,000 units per gram, same basis kilo. 43.88 - —

250,000 units per gram, same basis kilo. 33.75 - —

Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.

Vitamin A, liq. in oil, 1,000,000 A units per gram, 1,000,000 units .10 - —

Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 - —

Vitamin A palmitate, liq. in oil, 1,000,000 A units per gram, 1,000,000 units. .10 - —

Vitamin B_1 (see Thiamine hydrochloride).

Vitamin B_2 (see Riboflavin and Yeast).

Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tins gram. 139.00 - —

1% vitamin B_{12} USP, adsorbed on resin, 100 and 500-gram bots, on 1-5 kilo dms gram. 1.65 - —

0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.63 - —

Vitamin B_{12}, oral grade solids, in containers of 1 and 10 gram of B_{12} activity gram. 128.00 -

0.1 percent trituration of cryst B_{12} with dicalcium phosphate or mannitol, 1-10 kilo. 160.00 - —

Vitamin B_{12}, 0.1% cobalamin concentrate NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld gram. 1.33 - —

0.1% cobalamin concentrate in gelatin, 1-10 kilo dms., frt. alld gram. 1.33 - —

Vitamin C (see Ascorbic acid)

Vitamin D (see Codliver and Fishliver oils, Calciferol and Viosterol).

Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo. 42.50 - —

850,000 units per gram, less than kilo lots kilo 45.00 - —

Vitamin E (see a-Tocopherol and Wheat germ oil).

Vitamin G (see Riboflavin).

Vitamin H (see Biotin).

Vitamin K, active (see Menadione).

Vitamin K_1, 25 gram bots gram. 4.50 —

Violet methyl toner (see Methyl violet toner).

VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls lb. 2.25 - 2.50

Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.93 - —

dms., 25-49-lb. lots, New York or Chicago lb 2.05 - —

dms., 5-24-lb. lots, New York or Chicago lb. 2.15 - —

Watchung-type reds, bbls. lb. 1.95 - —

Waxes

Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms gal. 12.25 - —

Wheat starch (see Starch, wheat).

White lead (see Lead, white).

White mineral oil (see Mineral oil, white).

White pine bark, rossed, bls lb. .16 - .20

White precipitate, USP, powd., dms., lb. 6.55 - —

Whiting (see Calcium carbonate).

Wild cherry bark, thin, nat., bls lb. .16 - .20

Thin, rossed, bls lb. .21 - —

Wintergreen oil, USP, nat., northern, cns lb 6.35 - 17.50

USP, nat., southern, cns lb 3.75 7.00

Wintergreen oil, syn. (see Methyl salicylate).

Witch hazel bark, bls lb .16 - .17

Witch hazel leaves, bls lb .22 - —

Wollastonite, fine, bgs., c.l., works ton. 39.50 - —

bgs., l.c.l., ex whse ton. 56.00 - —

Medium, bgs., c.l., works ton. 27.00 - —

bgs., l.c.l., ex whse ton. 44.00 - —

Wood alcohol (see Methanol).

Wood oil (see Tung oil).

Woolfat, crude (see Degras).

Woolfat, USP (see Lanolin).

Wormseed, Levant, bgs lb. 2.50 - —

Wormseed oil (see Chenopodium oil, NF).

Wormwood oil, cns lb. 4.75 - 5.00

X

Xylene, coaltar, indust., tanks, works:

Bethlehem, Pa. gal. .29 - —

Birmingham dist. gal. .29 - —

Chicago dist. gal. .28½- —

Cleveland dist. gal. .29 - —

Xylene, coaltar, indust., tanks, works:

Geneva, Utah gal. .29 - —

Johnstown, Pa. gal 29 - —

Lackawanna, N. Y. gal 29½- —

Lone Star, Tex. gal 27 - —

Lorain, Ohio gal 29 - —

Middletown, Ohio gal 30 - —

Minnequa, Col. gal 29 - —

Philadelphia dist. gal 29 - —

Pittsburgh dist. gal 29 - —

Sparrows Point, Md. gal 29 - —

Terre Haute, Ind. gal 29 - —

Youngstown, Ohio gal 29 - —

Xylene, petroleum, indust., tanks, f.o.b. works:

Bayonne, N. J. gal. 29 - —

Baytown, Tex. gal. 27 - —

Charleston, S. C. gal 29 - —

Chicago, Ill. gal. 28½- —

Xylene, petroleum, indust., tanks, f.o.b. works:

Detroit, Mich. gal. 29 - —

Houston, Tex. gal 27 - —

Philadelphia, Pa. gal. 29 - —

Providence, R. I. gal. 30 - —

Sewell's Point, Va. gal. 28 - —

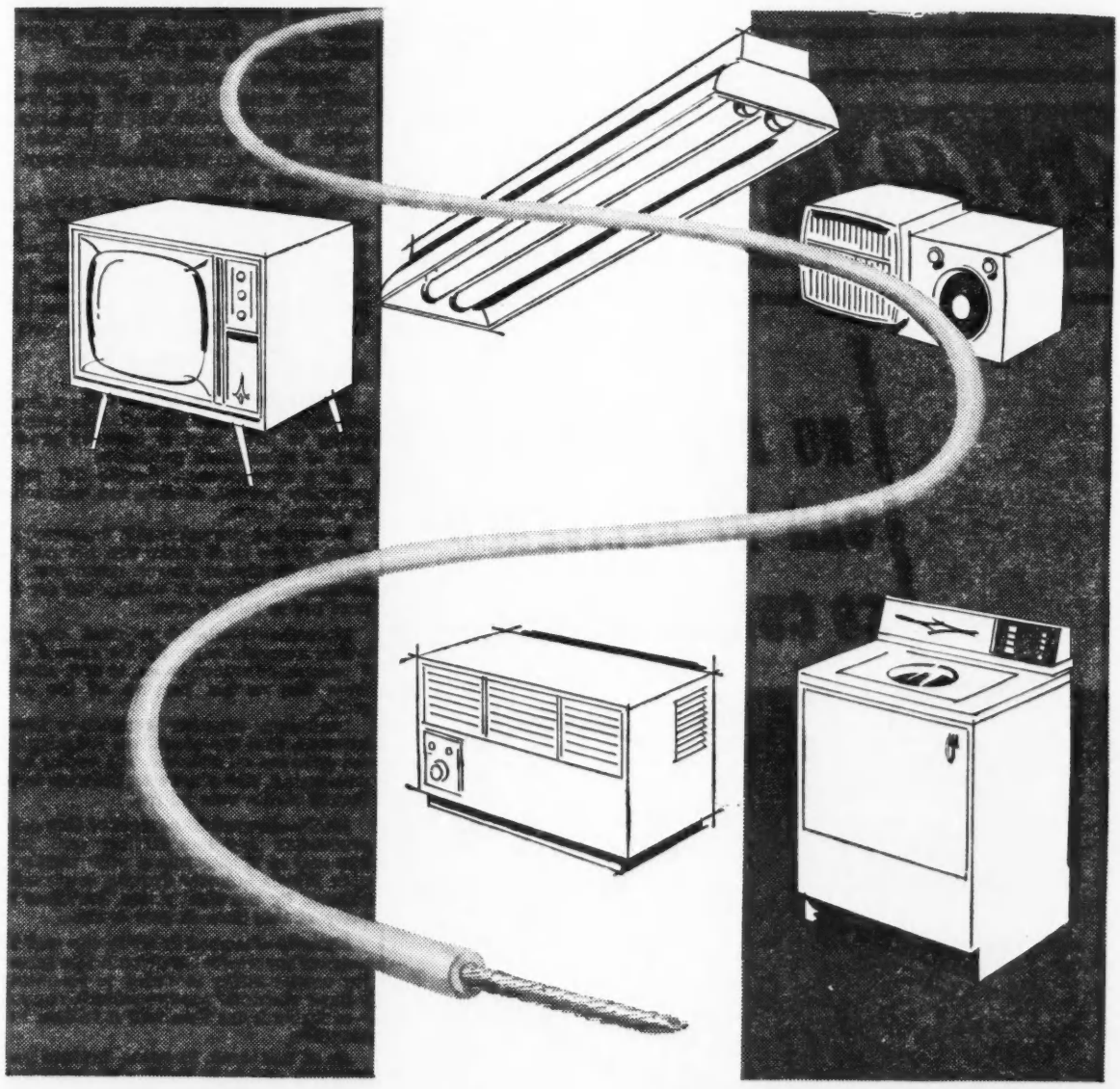
Wood River, Ill. gal. 28½- —

Xylenol, cryst., 45°-47° C., m.p., dms., l.c.l., works lb. .33 - —

56°-58° C., m.p., dms., l.c.l., works, frt. equald lb. .33 - —

60°-62° C., m.p., dms., l.c.l., same basis lb. .40 —

—Continued on page 67



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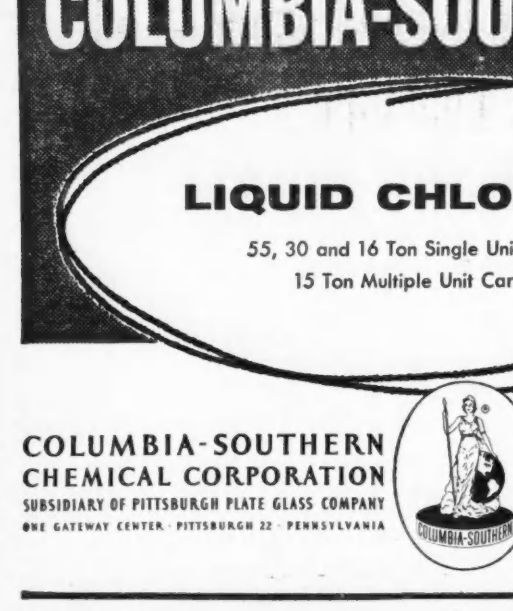

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Heavy Chemicals

The copper industry was afflicted with creeping paralysis last week, as strikes spread from one company to another, cutting into production of copper and consumption of heavy acids. Western copper facilities make their own acid—and the strike is expected to idle up to half a million tons of captive sulfuric capacity in that area. Eastern copper smelters buy acid, as a rule, and their suppliers are already feeling the curtailment of activity. The steel strike continues to adversely affect acid sales as well. Lime consumption is also at the vanishing point in many areas.

Borax producers got the word that the government was cancelling $200 million worth of contracts involving borane fuels last week. Generally, there was a feeling that the whole program had received disproportionate publicity.

Aluminum sulfate is being offered on a special contract basis in the northern New Jersey area at a $4-per-ton discount to consumers who use alum in particularly large volume.

Industry reports indicate that this move has been made by a producer in anticipation of competition from a now-building aluminum sulfate plant in the same area. Generally, it is stressed, contract prices are unchanged.

Potassium carbonate producers are looking closely at a new process for making terephthalic acid from benzene, which uses potassium carbonate to make potassium terephthalate as an intermediate step.

The American Paper and Pulp Association reported production for the week ended August 8, at 94.9 percent of theoretical capacity as compared with the revised figure of 93.5 percent for the previous week, and 89.3 percent for the corresponding week of last year.

Price Trends

Advanced
None

Reduced
Mercury, $3 per flk.

Comparative Price Indexes
(100=1949 average)

Latest week	Prev. week	Last month	Aug. 15, 1958
107.18	107.26	107.35	104.67

For Current Prices see page 10

Acids

Hydrochloric—There has been a heavy output of byproduct muriatic this summer, owing in large part to booming production of chlorinated pesticides.

As a consequence, though list prices generally prevail, shading has been noted in several areas.

Demand at present is still depressed because of the steel strike and summer vacataion shutdowns among consumers. No noteworthy pickup is anticipated for the next two to three weeks.

Hydrofluoric—Stainless steel demand, which accounts normally for around 5 to 7 percent of consumption, is still missing from the market because of the steel strike.

Producers consider themselves lucky, however, that the aluminum industry has not gone out on strike as had earlier been anticipated. The aluminum industry is the largest single user of HF.

Nitric—Around 85 percent of this acid's production goes into fertlizer each year. The rest of it goes into a wide variety of uses. Metals industry demand is adversely affected by the steel strike. Fertilizer inquiry at this time of year is slow.

Sulfuric—Demand is off in the east because of the steel labor dispute. The spreading copper strike is slated to de-activate a large chunk of captive sulfuric capacity—probably more than half a million tons annually.

As of last week, however, western business was said to be holding up fairly well. A spokesman for the copper industry indicated last week that where most western operations of copper companies furnish their own captive acid, eastern smelters usually buy theirs.

Steel production during the period was hardly worth talking about, but the American Iron and Steel Institute did anyway. Output was 332,000 tons, or 11.7 percent of capacity.

At that, it was slightly better than the previous week's 318,000 tons, or 11.2 percent of capacity. The institute notes that output for the comparable period in 1958 was 1,632,000 tons.

Bases and Salts

Aluminum Sulfate—Prices were stable except in the northern New Jersey area, where a producer, anticipating competition from a plant now under construction, offered concessions on a contractual basis to large-volume users.

One source explained that in the past several years, consumer preference for liquid alum has made aluminum sulfate plants less flexible in their coverage of territory, owing to the relative difficulty in transportation of liquid alum.

Hence, it is pointed out, alum plants tend to be limited more or less to a consuming territory within a reasonable radius around the producing plant.

Therefore, trade sources indicated, competition has been stimulated in the territory of one producer by the work in progress on a 40,000-ton-a-year alum plant only a few miles distant.

However, the situation is expected to be only local, due to the inherent difficulty experienced in shipment of liquid alum beyond a certain geographical radius.

Borax—The borane fuel balloon burst at last during the week, and there were some large sighs of relief among members of the borax industry.

The government cancelled more than $200 million in contracts with two suppliers of borane high energy fuels for the chemical planes B-70 and F-108. Plants at Model City, N.Y., for the Air Force and Muskogee, Okla., for the Navy, were expected to shut down.

For some time past, there had been a great hullabaloo concerning the possible impact of borane-type high energy fuels on the borax industry. Various surveys reported the possibility of vastly increased consumption.

For example, one frequently-quoted source reported that to keep thirty chemical bombers aloft for a year, using boron fuel only a quarter of the time, would eat up 45 percent of current borate output.

Still, in all the tub-thumping for exotic fuels, proponents tended to overlook a few adverse factors.

- Emphasis has been shifting steadily from manned planes to missiles.
- Borane fuels are very expensive, and have only military application.
- The government and other sources have indicated that manufacture of a borane-burning engine has been difficult because of a thick, troublesome combustion product.

One producer of borax indicated that the industry has met with nothing but frustration in trying to judge what has been needed by the government.

Another reiterated last week that despite all the fanfare and foofaraw about exotic fuels, the borax industry itself has continued to plan its future expansion on broadening of known end-uses.

The amount of borax required so far in the high energy fuel program "you could stick in your eye" was the phrase used by still another source.

While there is some hope that borane fuels will be used in solid form—perhaps in the Navy's intermediate range "Polaris" missile, tendency of borax producers is to count on glass, rather than gloss.

Chlorine—Demand is not at its strongest right now. Further, no real pickup is looked for until the end of the steel strike. The snap-back of the paper industry from low operational levels in July has been a considerable help to an otherwise easy market.

Copper Sulfate—The copper industry is slowly but surely being paralyzed by labor disputes. Despite this, copper sulfate supply is expected to prove adequate for some time to come.

Bureau of Mines reports that shipments of sulfate in June jumped 58 percent, to 5,280 tons from 3,336 tons in May. Output dropped 8 percent, to 3,724 tons from 4,060 tons in May.

Supplies fell 27 percent in June, to 4,492 tons from 6,172 tons at the end of May. At the June rate of shipments, the bureau notes, stocks were sufficient for little more than three weeks' needs.

Heavy Chemicals

Word last week was that warehouse stocks of sulfate were more than sufficient for current needs. Further, the industry indicated that even should the copper strike be of lengthy duration, it would be some time before supplies of sulfate tightened.

Exports of copper sulfate in June jumped to 1,152 tons. May exports amounted to a paltry 33 tons by comparison. Sellers took heart at the recovery shown during June.

Export business, which had accounted for a large share of sulfate demand in years past, took a bad beating in 1958. This was because banana plantations in Latin America sprayed trees with fuel oil rather than bordeaux mixture.

Potassium Carbonate—Producers are looking closely at a new development in the organic chemical field which may serve to pull this market out of the doldrums over the next few years.

A German firm has come up with a process whereby terephthalic acid is made directly from benzene, rather than from such relatively costly materials as benzoic acid or phthalic anhydride.

In the new process, benzene reacts with potassium carbonate to produce potassium terephthalate. Terephthalic acid is then derived from the salt by use of an acid.

Terephthalic acid is important in the manufacture of the polyester fiber polyethylene terephthalate ("Dacron"). Since expansion is going on in the polyester fiber business at present, it is believed that more terephthalic acid capacity, using the new process, is more than likely.

Sulfur—Market is still slow, although some recovery has been noted in consumption for non-acid uses. Sulfuric acid output can expect to be curtailed until the end of the steel strike.

There are continued reports of concessions on sulfur prices, particularly in the mid-continent area, although these appear to be local in nature.

Nonferrous Metals

Aluminum—The industry gives every indication of going on apace owing in large part to the agreement reached between management and labor to hold off a possible strike, awaiting developments in the steel situation.

Copper—Strikes are slowly spreading throughout the industry, and general belief is that by the middle of this week, output at mines and smelters here will be pretty well halted.

As the strike spread last week, scrap, custom smelters' and imported copper prices edged slightly upward. Primary producers' metal held unchanged, at 30c. per pound, delivered US destinations.

Mercury—Metal slid off some last week, quoted at $231 to $234 per flask, spot. flask, spot.

Silver—Bullion was unchanged, listed at 91^{3}⁄$_{8}$c. per troy ounce, spot.

Tin—Straits metal market continued fairly quiet, with quotations at around $1.02 per pound, spot, on Friday.

Monsanto Appoints Two To Organic Chemicals Post

Monsanto Chemical Company, St. Louis, Mo., has named two executives to newly-created posts in the organic chemicals division.

J. Paul Ekberg, jr., has been named product manager of agricultural chemicals and Reinhard S. Wobus has been appointed product director of petroleum chemicals and functional fluids. Mr. Ekberg moves up from assistant director of sales and Mr. Wobus from technical production manager of the division.

At the same time the firm has named three other men to new posts: H. James Lawler has been appointed director of sales planning; Desmond B. Hosmer has been named a technical production manager, and Dr. Norris L. Sample has been appointed manager of production planning and control.

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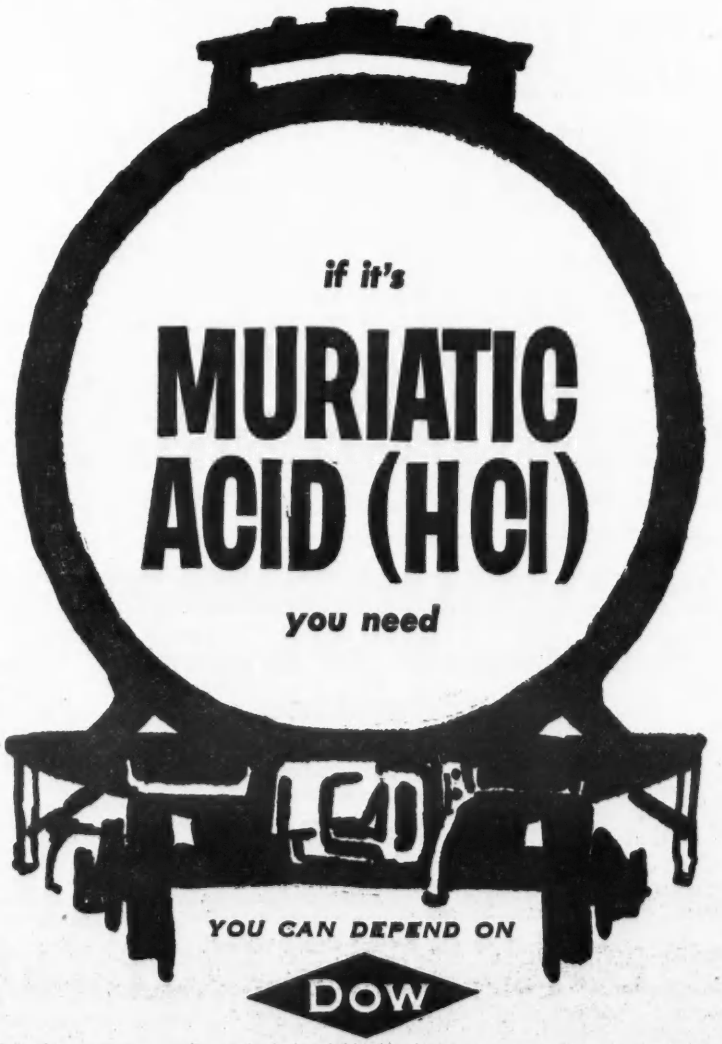

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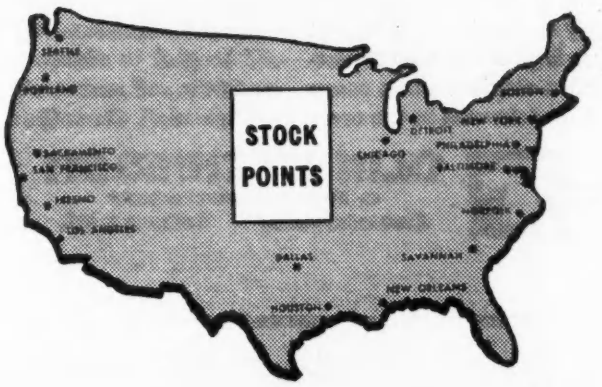

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Solvay Makes Some Changes In Its Sales Department Staff

Several organization changes have been made in the sales department of Allied Chemical Corporation's Solvay Process Division.

Included in the changes were appointment of Robert E. Clagett to assistant manager of Solvay's Pittsburgh, Pa., branch sales office, and Richard A. Marshall to the post of assistant to the manager of the organic chemicals section.

In addition, Stuart P. McNeill moves from the Philadelphia branch to New York, where he will assist in carrying out administrative functions of the sales department. Theodore W. Reed has been transferred from New York to Solvay's Boston branch where he will handle sales in one of the major territories of that office.

Mr. McNeill has already undertaken his assignment while the other appointments will become effective September 1, 1959.

Chicago AIC Will Honor Head of Bjorksten Labs

The Chicago chapter of the American Institute of Chemists will present its 1959 Honor Scroll to Dr. Johan A. Bjorksten, president of Bjorksten Research Laboratories, Madison, Wis.

The presentation will be made October 1, at a testimonial dinner to be held at the Furniture Club of America, in Chicago.

Dr. Bjorksten will speak on the subject of "Extending the Productive Part of the Scientist's Life—A Positive Approach to Employment After Fifty." His research has been mainly in the fields of high polymers, high-temperature-resistant materials, and foamed metals.

Staley Names UBS Head To Its Board of Directors

Paul W. Atwood, president of UBS Chemical Company, has been named a member of the board of directors of the A. E. Staley Manufacturing Company, Decatur, Ill. The Cambridge, Mass., chemical company was acquired by Staley in June.

In other board action taken at the same time the Staley directors elected Henry M. Staley assistant treasurer of the company and named three assistant secretaries: Kenneth J. Maltas, grain division manager; James W. Moore, crude oil department manager; and Edward C. Lane, meal sales department manager.

Tungsten Refining Plant To Undergo Expansion

Plans for the expansion of tungsten refining plant in Bishop, Calif., have been completed by Union Carbide Nuclear Company, New York, a division of Union Carbide Corporation. The new unit will enable the company to produce a high-purity tungsten raw material, ammonium paratungstate, at the mine site.

Union Carbide says the unique process represents an extension of the refining stage already in operation at the Bishop facilities. It is the first direct method for preparing ammonium paratungstate of this high purity from scheelite ore sources. The final product contains less than 0.003 percent each of molybdenum and silicon.

The new plant addition will be capable of producing large commercial quantities of tungsten as high purity ammonium paratungstate in addition to scheelite concentrate (calcium tungstate) manufacture. Scheduled completion of this expansion has been set for December.

Pilot plant studies for this process were performed at Union Carbide Nuclear Company's research center in Sterling Forest, near Tuxedo, N. Y. A second pilot plant, which is now in operation at the Bishop plant, is producing several thousand pounds within specification. Portions of this production have already been made available commercially.

Tide Water Vice President Named to Board of Directors

Herschel Y. Hyde, Tidewater Oil Company group vice-president for manufacturing, marketing and petrochemicals, has been elected a member of the company's board of directors to replace the late David S. Hecht.

Mr. Hyde, who joined Tidewater in 1928, was elected vice-president in charge of manufacturing for the company's western division in 1946 and, in 1954, was named to head all Tidewater refining operations. He was just recently named to the group vice-president post.

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Jobs & People

Abbott Laboratories, North Chicago, Ill.—**Glen H. Reiner,** director of purchasing, has been named chairman of an eleven-man advisory committee on purchases for the Chicago Board of Education.

Baird Chemical Industries, Inc., New York—**George dePasquale,** formerly of Stauffer Chemical Company and United States Rubber Company, has been named a sales representative.

Baker Perkins, Inc., Saginaw, Mich. Frank E. Young, representative of the chemical machinery division for forty years, has retired.

Borden Chemical Company, New York—**Willis Y. Anderson** has been named an east coast sales representative for the consumer products department. At the same time, the firm has appointed **Kenneth G. Vreeland** project manager in the central engineering department. Mr. Vreeland was formerly with Air Reduction Company.

Dixon Chemical Industries, Inc., Bloomfield, N. J.—**Daniel J. Lyons** has been made controller of the firm.

Monsanto Chemical Company, St. Louis, Mo.—**Edmond S. Bauer** has been appointed assistant director of development for the firm's plastics division.

Dow Chemical Company, Midland, Mich.—**Daniel Chapin** has been promoted to assistant to the manager of the Detroit, Mich., sales office. He will specialize in sales to the automobile industry.

Esso Standard Oil Company, New York—**Clifton C. Garvin, jr.,** has been named assistant general manager of the supply department.

B. F. Goodrich Company, Akron, Ohio—Two men—**Drs. Dean E. Ley** and **Louis E. Trapasso**—have joined the firm at the research center at Brecksville, Ohio.

Johnson & Johnson, New Brunswick, N. J.—**Herbert D. Towson** has been named field manager for the firm's Great Lakes sales division, with headquarters in Detroit, Mich.

Lubrizol Corporation, Cleveland, Ohio—**Kenneth A Danskin** has been named manager of foreign operations, a recently-created position in the foreign operations division of the firm.

Monsanto Chemical Company, St. Louis, Mo.—Two researchers—**Drs. Morton H. Gollis** and **Stanley D. Koch**—have been promoted to group leaders in the special projects department of the research and engineering division at Everett, Mass.

The National Aniline Division of Allied Chemical Corporation, New York—**Robert A. Hoffman** has been named resident manager of the Philadelphia sales branch, succeeding **Paul J. Sullivan,** who becomes resident manager of the New York sales branch.

Nease Chemical Company, State College, Pa.—**Laurence G. Mayne,** formerly with Food Machinery & Chemical Corporation, New York, has joined Nease as vice-president in charge of sales.

Pittsburgh Coke & Chemical Company, Pittsburgh, Pa.—**William E. Lowe** has been promoted to assistant traffic manager of the firm. Also named to new posts are **T. J. Matthews, H. M. Flenner, jr.,** and **W. H. Bechtol** as special assistants, and **H. E. Hough** as assistant rate analyst.

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GOODYEAR CHEMICAL DEPARTMENT HEADS: L. P. Thies (left) and W. E. Kelly (right), who have been managers of two new sales departments—polyester products and adhesives, respectively—within the chemical division of the Goodyear Tire & Rubber Company, Akron, Ohio. There are three other departments in Goodyear's chemical division: rubber and rubber chemicals, coatings and plastics. Mr. Thies was formerly head of the division's Detroit, Mich., office, while Mr. Kelly previously held a similar post in St. Louis, Mo.

Mallory Sharon Gets Okay On Sheet Rolling Programs

Mallory-Sharon Metals Corporation, Niles, Ohio, has been authorized by the Department of Defense to carry out sheet rolling programs on two high-strength titanium alloys.

The two titanium alloys involved are "MST 881" and "MST 7-12." Both exhibit high-strength characteristics for long periods of time at 1100 degrees Fahrenheit. "MST 881" originally was introduced late in 1958 as a forging material for use in aircraft and missiles.

Work on "MST 881" sheet will be carried out under funds already allocated to Mallory-Sharon by the Department of Defense for titanium alloy sheet rolling. Sheet development on "MST 7-12" will be conducted under terms of a new research contract between the company and the government agency. Both programs will be carried out concurrently.

Vickers Petroleum Appoints

Vickers Petroleum Company, Wichita, Kan., has appointed John C. Anderson controller-treasurer. Formerly controller of the firm, Mr. Anderson succeeds Thomas F. Dowd, jr., vice-president for finance and treasurer, who has left to enter the general corporation management field.

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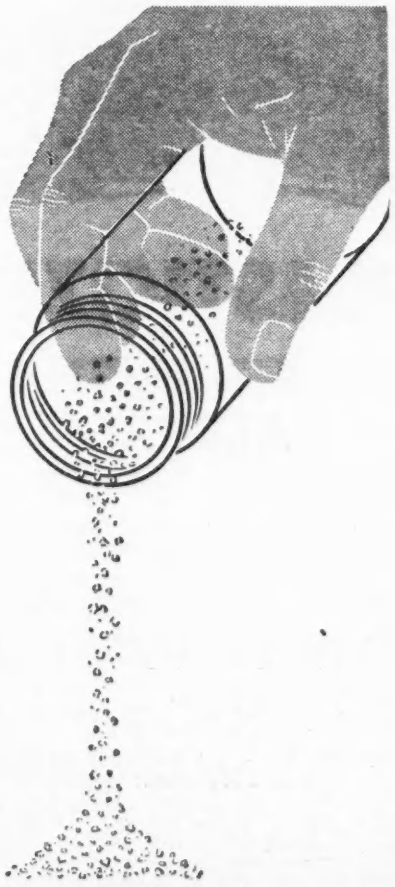

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Refractory Metals Expansion Is Programmed by Sylvania

Sylvania Electric Products Inc., New York, has completed plans to expand production of molybdenum, tungsten and other refractory metals used in ultra-high-temperature applications such as rockets, jet engines, and industrial furnaces. Sylvania is a subsidiary of General Telephone & Electronics Corporation.

At the headquarters of Sylvania's chemical and metallurgical division in Towanda, Pa., a custom-built 16-ton isostatic press has been installed to produce ingots up to four feet long and ten inches in diameter, according to Gerald L. Moran, vice-president and division general manager.

Production of molybdenum ingots four feet long and four and one-half inches in diameter has already begun, Mr. Moran revealed. The ingots weigh approximately 275 pounds. Until recently, commercially-available tungsten and molybdenum ingots have weighted less than 100 pounds.

Shell Oil Co. Is Planning New Distillate Hydrotreater

Shell Oil Company, New York, has announced it will build a new distillate hydrotreater at its Houston, Tex., refinery. Construction will start soon. Completion is scheduled for the second quarter of 1960.

The $2 million unit will employ Shell's "Trickle Flow Process." The company said the process is superior among hydrodesulfurization processes for middle and heavy distillates because it requires less hydrogen recycling than the vapor phase type of operation.

Four units employing the "Trickle Flow Process" are in use in the United States and Canada, and fifteen are being used overseas. Shell has made the process available to industry under a license arrangement.

The new unit at Houston will further improve the quality of 30,000 barrels per day of furnace oil and diesel fuel by removing impurities.

DuPont Making Mark

—Continued from page 7

holism by individuals and organizations. The book reflects the company's experience in a fifteen year program that has done yeoman's work in rehabilitating some 900 employees of the firm.

According to Dr. D'Alonzo, duPont's problem of alcoholism among employees is typical of the nation as a whole rather than an exception. Its 85,000 employees form a cross section of the public and the proportion of them who are alcoholics is average, he says.

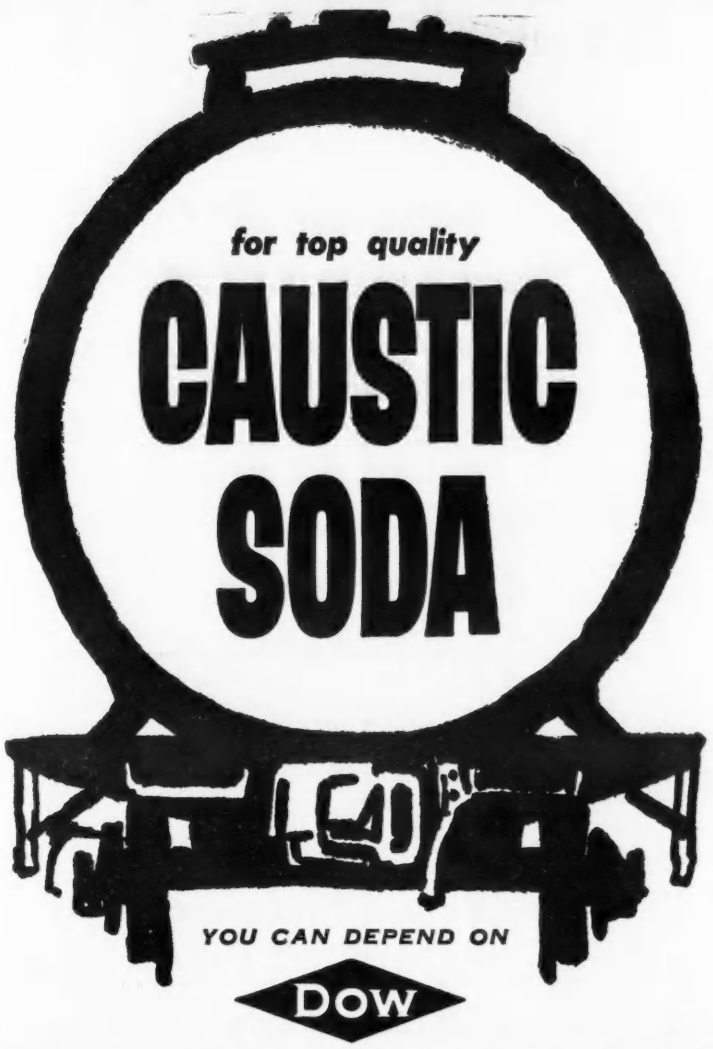
The way the firm's program works is this: A deliberate effort has been made to seek out the alcoholics so they could be rehabilitated. Over the years 1,254 cases were "discovered." More than half of them—690—have been rehabilitated and almost 20 percent more—240 have improved. For the rest the situation is unchanged or unknown.

Dr. D'Alonzo points out that unless an alcoholic is rehabilitated by some means, he invariably loses his health or his sanity, if not his life.

From the beginning, in 1944, the work has involved two parallel activities: general work through management and employees to spread the idea and break down stigmas attached to alcoholism, and direct work with alcoholics through Alcoholics Anonymous to rehabilitate them.

It is the sort of thing that can be done successfully by any willing group or individual, according to Dr. D'Alonzo. He points out in the book that the effort to recognize the disaese is a key factor in any attempt to do anything about it, whether by an individual or an organization.

Despite its success, the company still campaigns for the early recognition of symptoms of alcoholism, as the earlier it is recognized, the easier it can be treated. This and treatment of it as a disease are vital, according to the book.



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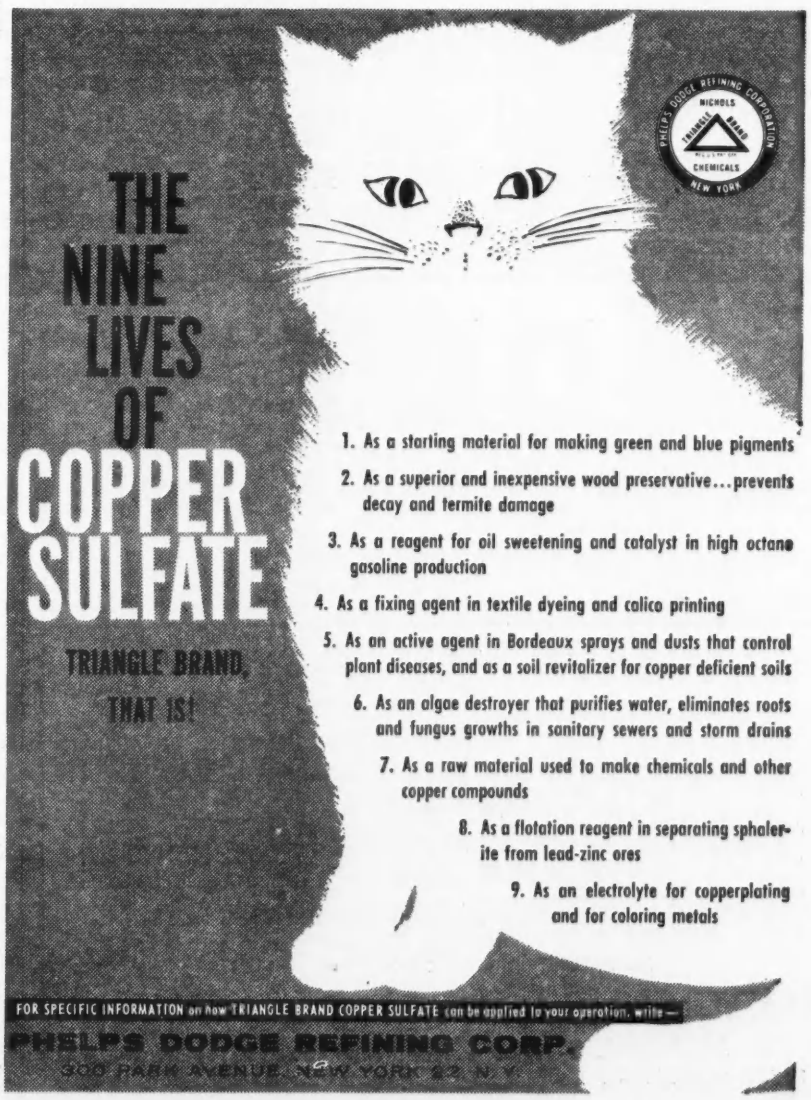
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Agricultural Chemicals

Feed and fertilizer markets continued quiet, according to last week's trade reports. A 25 cents per unit-ton decline in the price of tankage at both New York and Chicago was the only price action which took place. Tankage is newly quoted at $4.75 per unit-ton, New York, while Chicago listing is $5.25 per unit-ton. Sources remain optimistic for added activity in fertilizer markets during the balance of August and September, since discounted items begin to move upward in price at the close of this month. Makers of superphosphate have been using the seasonal lull to build up inventories after heavy demands depleted stocks last spring.

The trend to increased use of wet-process phosphoric acid for direct application continues in evidence, sources say. In order to smooth out the supply-demand pattern on this material, a producer recently put into service a storage tank with capacity for more than one million gallons of phosphatic fertilizer solution.

The Bureau of Mines reported United States production of phosphate rock in 1958 at 14,714,000 long tons as against 14,597,000 long tons last year. Value of this material was set at $92,769,000 as against $91,718,000 last year.

In a move toward more quality control, a major producer of pesticides and herbicides from botanicals has put into service in recent months, a blender capable of handling five tons of material at a time. It is pointed out that natural botanicals may vary from batch to batch in activity, and adequate blending is necessary to assure a standardized end-product.

Price Trends

Advanced
None

Reduced
Tankage, New York and Chicago, 25c. per unit-ton

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 15, 1958
110.49	110.51	111.14	108.33

For Current Prices see page 10

Animal and Plant Foods

Ammonium Sulfate—If the steel strike is a prolonged one, shortages will begin to show up, sources said. However, as with a number of other cokeoven products, consumers had ample time to protect themselves against a steel shutdown. High operating rates in the steel industry from the beginning of the year enabled cokeoven operators to turn out substantial tonnage and mixers' buying was brisk in the pre-strike period.

Animal Proteins—The market continued quiet. Demand from feed outlets remained poor, sources said. In the only change of the week, tankage was reduced 25c. per unit-ton at both New York and Chicago.

Tankage, New York, was newly quoted at $4.75 per unit-ton, while the listing at Chicago was $5.25 per unit-ton.

Phosphate Rock—The Bureau of Mines reports that production of crude ore and output of marketable phosphate rock increased 2 and 6 percent respectively during 1958. Florida continues as the largest producer. Estimated world output was up 7% over 1957 with increases in production noted in all major producing countries except Algeria.

Imports were mainly from Curacao and were at about the same level as during 1957. United States exports were reported to the Bureau at about 10% over the 1957 level.

Consumption continued on an uptrend, rising 4% above 1957, the previous high year.

Superphosphate—Market was seasonally quiet. Sources said they did not expect a pickup to materialize before the end of September. Inventories were reported to have built up a little during July and thus far in August after heavy demand during the seasonal period depleted producers' stocks.

Urea—Demand for both agricultural and industrial grades was off seasonally. Trading in industrial outlets was slowed by vacation shutdown, and sources say August is about the slowest month of the year for agricultural grade urea. Inventories, however, are not too heavy and a pickup is expected to begin by the end of next month.

Non-leaching properties make urea a good bet for use in areas where drenching rains are common. Sources pointed out that this was demonstrated in the Maine potato fields a few years ago, when it was found that fields fertilized with urea did not have to be re-treated after heavy rains.

The General Services Administration is asking bids on 10,000 metric tons of fertilizer grade urea or calcium ammonium nitrate for shipment to India under the Mutual Security Program.

Bids will be received until 5 p.m., EDT, August 24, under bid number FN-4S-28019-N-8-24-59, delivery 30 days after award of contracts.

Pesticides

Demand for herbicides has begun to slacken, according to trade reports. However, it was pointed out that this has been a fairly "long season," that is, consumers began to order early and kept up with steady refills throughout the summer. Demand for herbicides in the home-use market has continued to grow. Sources point out that use of formulations derived from botanicals continue to find good use in this market since there is less bother in their use, less equipment needed to apply them, and less rigid control over their use is needed as compared to the organic phosphates and chlorinated hydrocarbons used on large volume agricultural crops.

DDT—Using DDT tagged with radioactive carbon atoms, Department of Agriculture scientists at Orlando, Fla., may have come up with additional valuable information about the world's most widely used, and probably most thoroughly investigated, insecticide.

By tracing the insecticide in water, it was found that DDT is lost by evaporation concurrently with water by codistillation. In addition, DDT is so hydrophobic that it tends to concentrate on the upper water surface and container wall and bottom surfaces.

Chemists found that within two minutes after stirring in one part of DDT to every hundred million parts of water, as much as one-third of the DDT had moved to the walls and bottoms of containers whether made of paper, glass or aluminum. In twenty-four hours more than half of the DDT, long noted for persistance and non-volatility, had evaporated.

Government researchers feel the discovery may help to explain some of the unpredictable results that mosquito control workers have obtained in applying the insecticide to ponds, lakes and other mosquito breeding areas. Field studies are being contemplated to see if the change in the manner of using DDT will lead to more effective results.

p-Dichlorobenzene—Prices were unchanged from previous report. Although by far the bulk of the market for this material is for use in mothballs, it is also recommended for use in peach bore control.

Phosphate Rock Statistics: 1958

	1956	1957	1958
Mine Production (United States)	52,198	45,460	46,459
Marketable Production	15,747	13,976	14,879
Sold or used by producers	14,111	14,597	14,714
Imports	110	110	108
Exports	2,685	3,010	2,694
Apparent Consumption	11,536	11,697	12,128
World Production	33,850	32,560	34,870

* Source: Bureau of Mines. Production figures in thousand long tons.

Petroleum Derivatives

The squeeze put on the industry by the steel strike is beginning to make itself felt in various areas. In Houston, location of what one producer feels is an acute supply situation, some 1,000 tons has been sold at 33 cents per gallon. This is approximately four tankcars of benzene. Previously the same producer had sold a tankcar at the same price in the Houston area. However, major producers say the price of benzene stands at 31 cents, though they do concede the Houston situation to be a tight one and admit that some material has been moving at higher than the going quotation. In other sectors of the market too, the tight supply situation is becoming more pronounced. However, the feeling is that a sort of ratio has developed whereby the supply decline is related to the slack-off in output brought on by the cut-off of steel and its related materials. At pr[illegible]t, of course, it is diff cult to tell j[illegible] how much the present market situation is related to the steel strike because of the normal hot-weather slow down.

Current reports of the industry for the week ended July 31, indicate a decrease in crude oil production and an increase in crude runs. According to the American Petroleum Institute, the daily average output of crude (including lease condensate) was 6,808,000 barrels, a decrease of 47,000 barrels from the preceding week. Daily average crude runs to stills of 7,997,000 barrels were 45,000 barrels above the revised figure of 7,952,000 barrels for the preceding week, and 270,000 barrels above the week ended August 1, 1958. Runs of foreign crude amounted to 1,026,000 barrels daily, compared with 910,000 barrels in the preceding week. For the four week period ending July 31, crude oil production averaged 6,831,000 barrels daily, and crude runs to stills averaged 7,922,000 barrels daily with runs of foreign crude averaging 1,031,000 barrels daily.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 16, 1958
103.04	103.04	103.04	101.45

For Current Prices see page 10

Solvents and Diluents

Benzene—One important producer has reported the sale of 1,000 tons of benzene (approximately 4 tankcars) at Houston for 33 cents per gallon. The same producer had previously reported sale of one tankcar of benzene at the same price. However, major producers of the material report that despite the fact that the Houston benzene situation is a particularly tight one, the price of benzene remains pegged at 31 cents per gallon. One producer conceded that some material might be moving at something more than the quoted price; however the price structure for benzene is not seen shifting under the present pressure.

Partial Aromatics—Producers say that non-industrial sales are slacking off somewhat because of waning seasonal demand. However, the year's sales picture, though obviously curbed by the steel strike, still may appear stronger than had been initially hoped. Sales in the construction a[illegible]a particularly, it was noted, have been showing unexpected strength. Just how good things have been will be more apparent at the end of the year when manufacturers financial returns will be in.

Cleaners Naphtha—Seasonal slack-off is a[illegible]vent in this market, producers agree. S[illegible] have been alright. The feeling now is [illegible]at the market, with a few notches taken in its belt, will survive the synthetic fibers so prevelent today. Coexistance, one producer suggests, is the key to tomorrow.

LPG's

Propane—May production of this liquefied petroleum gas was 284,724,000 at plants was 284,724,000 gallons while refinery output was tallied at 117,936,000 gallons, according to the monthly review of the Bureau of Mines. Stocks at plants and terminals, the government report says, was 465,277,000 gallons at the end of May as compared with the 347,205,000 gallons on hand at the end of April. Demand in deliveries from plants and terminals for use in gasoline was 2,268,000 gallons while other uses accounted for 277,532,000 gallons in May.

Butane—Production of this liquefied gas at plants in May was 174,825,000 gallons, while refinery amounted to 66,318,000 gallons, according to the Bureau of Mines. Stocks (including underground) at plants and terminals amounted to 230,927,000 gallons at the end of May as compared to the 174,510,000 gallons on hand at the end of April. Demand through deliveries from plants and terminals for use in gasoline was 47,437,000 gallons in May while other uses accounted for 134,685,000 gallons.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Aug. 1 totaled 263,692,000 barrels according to data reported by the Bureau of Mines. Compared with the total of 264,732,000 barrels the preceding week, this represents a decrease of 1,040,000 barrels comprising a decrease of 508,000 barrels in stock of domestic crude and a decrease of 532,000 barrels in stocks of foreign crude.

Waxes, Minerals

Production of petroleum waxes in May totaled 473,000 barrels, according to the monthly report of the Bureau of Mines. The figure falls somewhat short of the 506,000 barrels produced during April though it is stronger than the 425,000 barrel output tally marked up for May of last year. Production for the first five months of the year, according to the Bureau's report, was 2,352,000 barrels as compared with the 2,135,000 barrels produced durin the first five months of last year.

Domestic demand for petroleum wax amounted to 358,000 barrels or 12,000 barrels per day, the report points out. April demand had been 391,000 barrels while that of May, a year ago, was 333,000 barrels. Demand for the first five months of the year was 1,903,000 barrels as compared to the 1,729,000 barrels figure chalked up for the same period in 1958.

Stocks of petroleum wax were tallied at 741,000 barrels as compared with the 715,000 barrels on hand at the end of April and the 735,000 barrels on hand at the end of May, 1958. Stocks on hand for the first five months of the year were tallied at 741,000 barrels as compared with the 735,000 barrels on hand at the end of the first five months of the year previous.

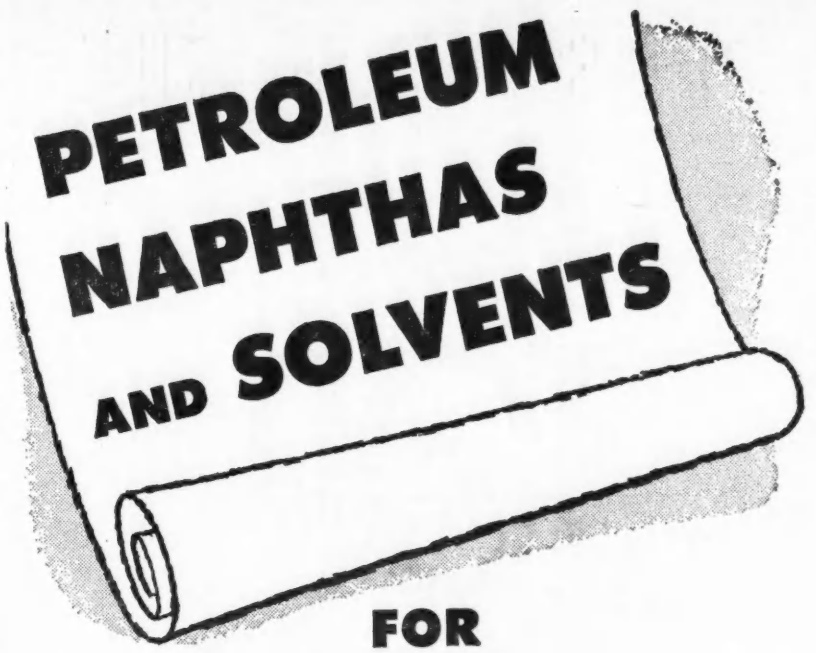
Miscellaneous

Crude Oil—Production in Saudi Arabia during July totaled 32,943,375 barrels, or an average of 1,062,690 barrels per calendar day, according to a report. This compares with 32,431,567 barrels, or an average of 1,046,180 barrels per calendar day, during the corresponding month last year.

Crude processed during July amounted to 4,858,820 barrels, an average of 156,736 barrels per calendar day, as compared with 5,066,795 barrels, an average of 163,445 barrels per calendar day, during the corresponding month last year.

Total production of crude oil during the first seven months of 1959 was 227,290,381 barrels, an average of 1,072,124 barrels per calendar day. This compares with a total of 211,859,427 barrels, an average of 999,337 barrels per calendar day, during the corresponding period last year.

Crude run during the first seven months of 1959 amounted to 37,049,174 barrels, an average of 174,760 barrels per calendar day, as compared with 36,958,233 barrels, an average of 174,331 barrels per calendar day, during the corresponding period last year.



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Espesol 100	156.0°F	202.0°F	1.0	30	Rubber Processing, Adhesives
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Espesol 210	206.0°F	238.0°F	43.0 (KBV)	30	Lacquer, Rotogravure, Printing, Oil Extraction
Espesol 250	246.0°F	275.0°F	37.0 (KBV)	30	VM & P Naphtha, Paint, Varnish
Espesol 300	311.0°F	389.0°F	38.0 (KBV)	30	Dry Cleaning
Espesol 310A (DriRex)	306.0°F	338.0°F	30.0 (KBV)	30	Dry Cleaning, Paint, Varnish
Espesol 350	362.0°F	408.0°F	34.0 (KBV)	30	Paint, Varnish, Dry Cleaning
Espesol 360 (Espessene)	365.0°F	474.0°F	1.0	30	Insecticides, Paint, Varnish

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Aliphatic Organics

A giant chemical complex has decided to extend its sphere of activity and influence to synthetic glycerine. Its decision, announced last week simultaneously with disclosure of a multi-million dollar expansion program, took none in or outside the trade completely by surprise. The likelihood of a third synthetic glycerine producer has for sometime now been a hot rumor—one that was explored in this space May 11—and, then too, it was known that the government planned to withdraw a Certificate of Necessity given the firm in question for a glycerine facility, on August 1, if no positive action had been taken.

While the certificate may or may not have had anything to do with the firm's decision, it is obviously quite a handy thing to have in one's pocket when income tax time rolls round. The explanation is simple: A Certificate of Necessity allows "accelerated amortization" of any facility for which it has been awarded. This means that the holder may for tax purposes write off the entire cost of the plant over a period of five years, rather than the twenty years otherwise required.

Given by the Office of Civilian and Defense Mobilization, upon Commerce department recommendations, these certificates are authorized by the Defense Production Act. The program was also incorporated into the Internal Revenue Law during the Korean conflict.

Besides glycerine, the firm's expansion plans call for new facilities for the manufacture of epichlorohydrin, propylene oxide, propylene glycol, and polypropylene glycols. Additionally, the firm will expand existing units to double output of glycol ethers, surfactants, and ethylene dichloride.

It may be that propylene is the important part of the firm's expansion program. In addition to being one starting point for glycerine, the chemical also gets into surface active agent, hydraulic fluids, synthetic lubricants, etc. Its coming importance is attested to by the fact that one chemical firm has just brought a propylene plant on-stream, while another—a leading oil refiner—will be in the market by the beginning of next year.

Other market developments last week included two price changes. Glacial methacrylic acid was reduced 5 cents per pound in bulk quantities, 4.5 cents per pound in drums, establishing listings of 40 cents, tankcars, and 42½ cents, truckloads.

Also, molasses prices at New Orleans, continuing a month-long downtrend, dropped an additional one-quarter cent. This brought the quote to 10.75 cents to 11 cents per gallon, far below the 18 cents per gallon tag molasses carried this time last year.

Acrylonitrile—Trade reports indicate that demand for acrylonitrile has been seasonally active, due in the last analysis to the fact that the textile mills have been busy turning out winterweight materials, currently the biggest clothing outlet for acrylic fibers.

There have been no new developments of tremendous consequence in this market since the largest single merchant consumer of acrylo gave out the news in mid-June that it was planning on turning producer. The firm's plant won't be in operation before the latter part of next year so there is no immediate concern over price weakness or other possible repercussions that often attend the debut of a new producer in an already crowded, capacity-rich market.

2-Ethylhexyl Alcohol—Among organic chemicals, 2-ethylhexyl alcohol is currently—and has been for some weeks now—one of the really bright spots. Demand is said to be excellent but, unfortunately, supplies are rather tight. Such a situation caused one supplier to commit its entire fourth quarter production some time ago.

Formaldehyde—When "Delrin" acetal resin goes on sale later this summer (at 95c. per pound in truckload quantities), quite a few people both in and outside the chemical trades will be keeping close watch to see how the radically new thermoplastic sells.

One of the more interested groups, of course, will be formaldehyde and methanol producers. Not only will they be estimating what the new resin could mean in terms of formaldehyde and methanol consumption but they'll also be anxious to learn if acceptance is good enough and fast enough to encourage Delrin's developer to license another manufacturer.

Producers of competitive materials—other plastics, non-ferrous metals like zinc and aluminum—will also be keeping an eye on "Delrin." This may prove a worthwhile pursuit because "Delrin" already looks like a winner with almost limitless applications in any number of industries.

Glycerine—The possibility of a third synthetic glycerine producer, discussed in this space three months ago, has become a fait accompli. A leading chemical firm last week disclosed plans for glycerine and epichlorohydrin production facilities which it will build under a Certificate of Necessity. Completion of the new facilities is slated for early in 1961.

About a year later and through 1964, a spokesman for the firm says, demand for glycerine and epichlorohydrin will be approximately 335,000,000 pounds a year, compared with the current total requirement of about 250,000,000. Obviousiy, this growth aspect—rather confusingly put, lumping glycerine and epi together—was one of several reasons why the firm decided to get into production of these chemicals.

Then, of course, epichlorohydrin itself is coming in for increased interest. In addition to its intermediate role in the manufacture of glycerine, it also gets into epoxy resins, a market that is growing by leaps and bounds. In fact, a major resins producer recently announced that it was constructing an epi plant to fill its own requirements.

Actually, the glycerine and epichlorohydrin facilities are only two projects in the firm's $30 million expansion program which also includes new units for the manufacture of propylene oxide, propylene glycol, and polypropylene glycols. These chemicals are interrelated and related to glycerine in the manufacturing process in one way or another.

As with epi, there is also much interest these days in propylene. One firm had just brought a plant on stream, and a second has a plant under construction.

It would appear then that the firm's reasons for deciding to go ahead on glycerine are tightly interwoven. Not to be overlooked, of course, is the fact that the firm has a Certificate of Necessity for the glycerine-epi-chlorohydrin facilities.

Said certificate will permit the company to write off the cost of the plant for tax purposes over a five-year period, and not the usual twenty years otherwise required by law. This is called "accelerated amortization," and amounts to quite a nice tax savings.

Awarded by the Office of Civilian and Defense Mobilization, upon Commerce department recommendations, these certificates are authorized by the Defense Production Act.

Substantial improvement in the statistical position for glycerine during the first half of 1959 is reported by the Association of American Soap and Glycerine Producers.

A look at the figures: In the first six months of '59, glycerine disappearance amounted to 126,700,000 pounds, compared with 113,600,000 during the same period in '58. Production (crude and synthetic) was up about the same amount, from 101,500,000 to 125,800,000, considering that stocks at the end of June, this year, were higher by about 10 million pounds than those held a year ago.

Statistics for June of this year show that production was up to 23,200,000 pounds from 20,900,000 in May; that disappearance was up to 22,100,000 from 19,500,000; that end-of month stocks rose slightly, to

Price Trends

Advanced
None

Reduced
Methacrylic acid, glacial, t.c., 5c. per lb. Molasses, New Orleans, ¼c. per gal.

Comparative Price Indexes
(100=1949 average)

week	week	Last month	Aug. 15, 1958
130.49	130.55	130.55	130.55

For Current Prices see page 10

53,100,000 pounds from 52,600,000. Comparable statistics for June 1958 were: production 16,400,000; disappearance 20,400,000; end-of-month stocks 63,300,000 pounds.

Methacrylic Acid—Effective August 10, a major producer reduced prices of glacial methacrylic acid 5 cents per pound in bulk quantities, 4.5 cents per pound in drums. Action established the tanktruck or tankcar listing at 40c. per pound, the truckload at 42½c., and the less truckload at 43c. per pound.

Other listings: 13-gallon carboys 48c., 5-gallon containers 65c., and 1-gallon containers 75c. per pound.

Schedule is written on an f.o.b. works basis, freight equalized with nearest producing point on one drum or more. Producer advises that tanktruck and partial tanktruck shipments will be made only if carrier service is available and freight charges are not excessive.

Glacial methacrylic acid is supplied either in returnable stainless steel drums with $110 deposit or non-returnable polyethylene insert steel drums, buyer's option.

Methacrylic acid can be polymerized, copolymerized with other monomers or used as a chemical intermediate. Typical applications include adhesives, laminating resins, solvent and emulsion coatings, photographic chemicals, elastomers, ion exchange resins, and polymer emulsions for textile, leather and paper finishing.

Acrylic acid is currently priced at 65c. per pound in drum lots of less than truckload quantities. Schedule was set up by a 50 percent price reduction (former listing $1.15) last October which was designed to arouse research interest in the chemical and eventually widen the end-use area.

Molasses—Markets for feeding cane molasses were weaker in most parts of the nation, except the Northeast and Middle East states during the week ended August 11. Demand was slow to moderate, trading light as many buyers preferred to wait for the price decline to level off before making additional large purchases, Agricultural Marketing Service reported.

Prices at New Orleans were ¼ cent lower at 10.75-11c. per gallon. New York quote was unchanged at 16c. a gallon, however. It is interesting to note that the same week a year ago, the New Orleans listing was 18c.-18.5c., the New York listing 24c. per gallon.

Imports of industrial molasses during June totaled 25.1 million gallons, slightly less than the 28.2 million imported in May. This brought imports for the first half of the year to 157 million gallons, compared to 183 million during the same period in 1958.

Major sources of June imports, in millions of gallons, were Cuba (3.8), Dominican Republic (5.0), Mexico (6.7), Jamaica (3.5), France (2.4), and India (1.5).

Exports of industrial molasses from the US and its territories in June amounted to 1.4 million gallons, the same as May. This brought total exports, January 1 through June 30, to 9.3 million gallons, as against 7.3 million during the same period in '58. Of the cumulative exports this year, 2.3 million gallons were from Hawaii, 5.4 million from Puerto Rico, and 1.6 million from the mainland.

Cuban blackstrap molasses production from the 1959 sugarcane crop reached 306,161,286 gallons as of July 15, according to the Cuban Sugar Stabilization Institute. Last year by July 15, production of blackstrap from the 1958 cane crop had amounted to 230,684,742 gallons. This year's production of blackstrap is almost complete as 159 of the 161 cane grinding plants have finished operations for this season.

Propylene—There's lots of activity here. One chemical firm has just brought a propylene plant onstream, and a second announced early last week that it would begin production of propylene oxide, propylene glycol, and polypropylene glycol by January 1, 1960.

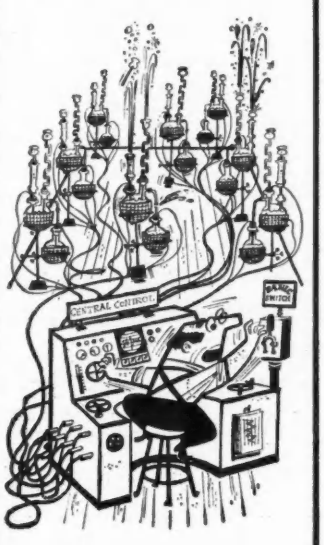
Also the first of the year, a leading oil refiner will debut in this market with a $2 million facility, designed to produce 100,000,000 pounds of propylene annually with a purity of 99 percent.

Propylene oxide is used as the base for manufacturing propylene glycol, polypropylene and other derivatives. End uses include the manufacture of special surface active agents, hydraulic fluids, synthetic lubricants and petroleum derivatives.

Vinyl Acetate—Imports of vinyl acetate (unpolymerized) in June amounted to 3,757,246 pounds, up from 2,673,187 in May. Canada, as usual, was the major source of supply (3,743,100); Japan shipped the remainder (14,146).

Producers report that demand for vinyl acetate is running into very good volume, noting additionally that there has been no terrific seasonal slump in requirements this year. From all accounts, supplies are fully adequate, prices stable.

An adjustment in less carload prices (an increase of ½ cent per pound) was made July 1, to account for higher drum and freight costs, by producers who had not taken similar action earlier.



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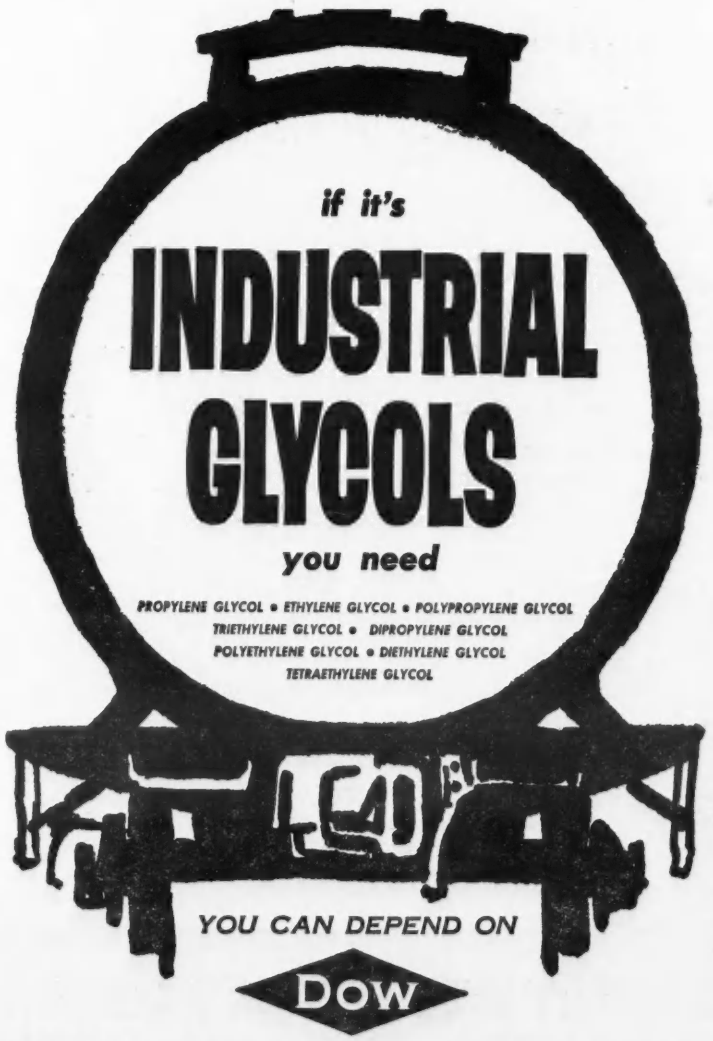

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Agricultural Barter Law Gains in House Committee

A one-year extension of Public Law 480 for bartering surplus agricultural products for foreign material was voted last week by the house agricultural committee, but without the amendment wanted by the chemical industry. The bill is to be reported to the house this week and called up for passage at an early date.

The bill includes a provision for mandatory barter of $350 million worth of farm products for foreign strategic material, but leaves it permissive with the secretary of Agriculture to determine the type of material to be acquired.

Because the chemical industry depends heavily on foreign sources for some of its metals and minerals, spokesmen urged that the secretary be required to barter for those materials in short supply here, and to accept materials processed domestically from these foreign materials in the exchange. The committee, however, merely "authorized" the secretary to enter into such transactions.

Medicinals Output

—Continued from page 5

pounds, valued at $555 million, compared with sales in 1957 of 80 million pounds, valued at $576 million—an increase of 1.8 percent in quantity and a decrease of 3.6 percent in value.

In terms of value, the commission's report points out, antibiotics were the most important medicinals produced last year. Total production of all antibiotics for human and veterinary purposes in 1958 was 2.6 million pounds, or 8.3 percent more than the 2.4 million pounds reported for 1957. Sales in 1958 were 1.9 million pounds, valued at $304.7 million—a decline of 5 percent in quantity and 6 percent in value, compared with 1957.

Production of penicillin salts in 1958 amounted to 392 trillion International Units, compared with 526 trillion International Units in 1957. Sales in 1958 totaled 372 trillion International Units, valued at $60.3 million, compared with 456 trillion International Units, valued at $66.3 million, in 1957.

Production of dihydrostreptomycin amounted to 561,000 pounds in 1958, compared with 582,000 pounds in 1957; sales in 1958 were 465,000 pounds, valued at $17.9 million.

Streptomycin Output Down

Production of streptomycin in 1958 amounted to 179,000 pounds, compared with the 198,000 pounds reported for 1957. Production of tetracycline was 287,000 pounds in 1958, compared with 404,000 pounds in 1957.

The combined output of other medicinal antibiotics, such as chlortetracycline, chloramphenicol, erthromycin, and oleandomycin, amounted to 1.0 million pounds in 1958; sales of this group were 487,000 pounds, valued at $125 million.

Production of antibiotics for animal feed supplements, food preservation, and crop spraying in 1958, which totaled 903,000 pounds, was substantially larger than the 870,000 pounds reported for 1957.

Among the other important groups of medicinals produced in 1958 were the vitamins, combined output of which was 9.8 million pounds, compared with 8.6 million pounds in 1957. Sales of all vitamins in 1958 totaled 6.9 million pounds, valued at $78.2 million. Sales of hormones in 1958 amounted to 46,000 pounds, valued at $24.9 million. The output of sulfa drugs in 1958—3.7 million pounds—was slightly smaller than the 3.8 million pounds produced in 1957.

The medicinal produced in largest quantity in 1958, as in previous years, was acetylsalicylic acid (Aspirin), the output of which was 20.8 million pounds.

Production of barbiturates totaled 790,000 pounds in 1958—only 35,000 pounds more than the output in 1957.

Production of all tranquilizers was 657,000 pounds in 1958—307,000 pounds less than in 1957.

Olin's Secret

—Continued from page 5

packaging, pharmaceuticals, energy and sporting arms and ammunition."

The glycerine and epichlorohydrin facilities, to be built under a certificate of necessity, are expected to be completed early in 1961. A new process developed by Olin will be used to produce the two chemicals.

According to Edward Block, senior vice-president in charge of the chemicals division, demand for glycerine and epichlorohydrin will be approximately 335 million pounds a year in the 1962-64 period. Current total demand for natural and chemically synthesized glycerine and epichlorohydrin is about 250 million pounds a year. In spite of the growing demand, Mr. Block says, there will be a continuing decline in the availability of natural glycerin.

Expanded facilities at Brandenburg will begin production of propylene oxide, propylene glycol and polypropylene glycol by the first of next year.

The Joliet facilities for manufacturing sulfamic acid will also be in production by the first of the year.

Sulfamic acid is used chiefly for descaling industrial and dairy equipment, as a sulfating agent in the production of liquid detergents and as an intermediate in the production of food sweeteners.

Principal products of the Joliet plant are phosphates used for making detergents, hydrofluoric acid and sulfuric acid.

Plans for expansion at Niagara Falls were completed in May for a new electrolytic cell program used for chlorine production. The new cells will occupy less space than those presently in use and will make possible an increase in chlorine tonnage.

In addition to this expansion program, Olin nearly two months ago announced that it is also investing $4 million as its share in a joint venture with Sun Oil Company to produce urea at North Claymont, Del. (OPD, 6/29/59).

Urea, Calcium Ammonium Nitrate Bids Asked for India

General Services Administration has invited bids from the fertilizer industry for supplying approximately 10,000 metric tons of fertilizer grade urea or 18,500 metric tons of calcium-ammonium nitrate for shipment to India under the mutual security program.

Bids will be received by the agency until 5 p.m. EDT August 24 under invitation number FN-4S-28019-N-8-24-59. The material is to be for delivery within thirty days after the award of contracts.

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Trade Name Chemicals & Specialties

The steady growing volume of business of plastic sheeting and wrapping fabrications, including the efforts of polyethylene to capture a share of the package wrapping market, has led to stepped up demand for existing ultraviolet absorbing chemicals. Ultraviolet absorbers are described as being chemicals added to organic materials to protect them from the deteriorating action of ultraviolet radiation. The short wave length light rays which compose the ultraviolet rays, when not absorbed by some pigment or added chemical tend to cause molecular breakdown, discoloratiion, and ultimate failure on daylight exposure of such materials as plastic films, varnish films, photosensitive cosmetic preparations. Typical chemicals which do a good job of absorbing ultraviolet light are in what are considered to be critical ranges are the benzophenone-benzotrazole types.

tThere are thousands of different enzymes due to the fact that they occur in all living cells and may vary with the species. Enzymes are not living organisms themselves, but are secreted by living tissues such as glands and by organisms such as fungi and bacteria. All enzymes isolated thus far have been proteins. Enzymes find application in many industries including use in cosmetic and dentifrice products to cut down on germ activity, and in the textile industry to desize fibers of all types.

According to a report put out by the United States Tariff Commission on the 1958 production and sales of surface active agents, under the general heading of cyclic surfactants production of nonionic nonsulfonated esters and ethers amounted to 96,851,000 pounds with sales totaling 84,768,000 pounds worth $22,838,000. Total output of cationic and amphoteric nonsulfonated nitrogen-continuing surfactants was 9,366,000 pounds with sales worth 9,133,000 pounds at a dollar value of $5,617,000. Anionic sulfated and sulfonated cyclic surfactants had a production rate of 729,636,000 with sales amounting to 670,413,000 pounds at a value of $96,596,000.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Enzymes

Enzymes find wide application in the textile industry in which they act as desizing agents. Enzymes are used to digest starch sizes on various blends of natural or synthetic fibers, and also to desize fibers processed with such substances as glue, gelatin, and casein. Starch is made up of two main components; amylose and amylopectin. Enzymes affect these two portions by reducing the molecular weight of the starch and increasing its solubility. Enzymes attack the amylose portion breaking the chain and thus improving the solubility of the amylose component. Amylopectin, which provides the viscosity and body to the starch, is degraded only through the action of enzymes.

Pabst Brewing Company manufactures a series of enzymes used as desizing agents by the textile industry to breakdown and solubilize the starch size used on natural or synthetic fibers. This family of bacterial amylase enzyme products is trade named **"Exsize," "Super Exsize"** and **"Exsize HA." "Super Exsize,"** explains Pabst, is about double **"Exsize"** in strength, and **"Exsize HA"** is a five-fold concentrate of **"Exsize."**

All are described as being brown colored aqueous products which can be mixed easily into water to form uniform solutions. Among their characteristics Pabst states that the **"Exsize"** products have a standardized neutral pH and are harmless to animal, synthetic or vegetable fiber. They also have excellent storage and high temperature heat stability.

According to Pabst, **"Exsize"** enzymes are characterized by strong dextrinizing and liquefying enzymatic activity. The enzyme is predominately alpha amylase and is of bacterial origin. Pabst explains that it works by attacking the amylose and amylopectin components of starch to breakdown and chain. Molecular weight is reduced, and water soluble dextrins and low molecular weight carbohydrates are formed. These can be removed easily by washing with water.

Wallerstein Company, Inc., has on the market **"Rapidase,"** a bacterial, amylolytic enzyme preparation with maximum built-in heat resistance. In practice, explains Wallerstein, this means that **"Rapidase"** acts most rapidly at high temperatures without loss of desizing efficiency. In addition, **"Rapidase"** is said to contain a special stabilizing ingredient which fortifies the heat-resistant properties and increases its stability during storage.

According to Wallerstein, although **"Rapidase"** is essentially an amylolytic enzyme, it also has proteolytic properties. This is said to be a distinct advantage in desizing gray (greige) goods which may contain, in addition to the starch size, a certain amount of protein size. Other important uses of **"Rapidase"** are the removal of starch in refinishing and in the removal of starch pastes in print washing.

"Rapidase" solutions are described as being light brown in color, neutral and stable at ordinary temperatures. **"Rapidase"** activity is not impared by short exposure to subfreezing temperatures.

Sizing Agents

Almost every paper mill when using rosins at some time or other runs into sizing problems. Sizing difficulties have been said to occur most frequently with hard-sized sheets such as technical papers, ledger and chart paper, safety check, onionskin, bleached kraft bags, twisting, finer writing papers, food and liquid container board, and others. Uniform sizing is of the utmost importance with these grades and all other grades of paper. Discussed below are a sizing agent which is a synthetic resin size and two wax sizes.

The paper chemicals department of Monsanto Chemical Company manufactures **"Mersize RM,"** a chemically-made resin size. According to company reports, **"Mersize"** is a chemically-made resin far richer in carboxyl (-COOH) groups than natural rosin. The carboxyl groups in **"Mersize"** are said to be both greater in number and more available for use because the chemically-made resin particle is smaller than the rosin size particle.

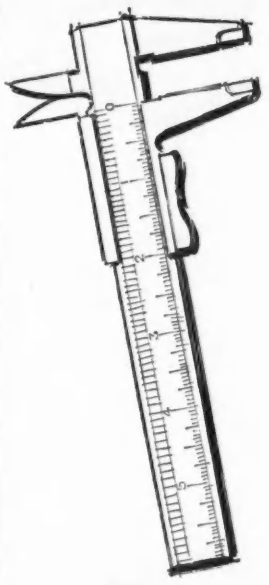
Further characteristics of **"Mersize RM"** include its ability to combine with regular amounts of alum used to precipitate the size. Also, Monsanto claims that **"Mersize RM"** makes the mill operation more efficient.

Among its advantages, Monsanto states that **"Mersize RM"** reduces materials handling and size preparation to the minimum essentials; it can be used in the regular rosin size dispersing equipment or it can be emulsified by stirring into hot water; it has a unique levelling action.

Finally, improvements available with use of **"Mersize RM,"** continues Monsanto, are reduction of broken and lost machine time, improvement of resistance to feathering, minimum surface sizing, increase in water resistance, and stabilized sizing.

"Alwax" and **"Waxine"** sizes, aqueous emulsions of paraffin waxes and paraffin-rosin combinations respectively, are marketed by American Cyanamid Company. Both types are dilutable with water to concentrations as low as one percent or 0.5 percent solids. Regardless of the wax

—*Continued on page 50*



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*N-FATTY 1, 3-PROPYLENE DIAMINES (General Mills Diams®) $RNH(CH_2)_3NH_2$

*FATTY AMINE ACETATES (General Mills Alamacs®) $RNH_3^+CH_3COO^-$

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PLASTICS AND COAL CHEMICALS DIVISION
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Allied Chemical

Coal Chemicals

Th steel talks continued to reflect a total lack of optimism, and guesses as to when the strike might end ranged up to the end of September. Concerning coal chemicals supply, the effect of the strike is still considered minor. However, the uncompromising stand taken by both sidse makes consumers anxious to reinforce the inventories they built, wherever there is an alternate source of supply. In the benzene market, this was difficult as an apparent shortage of petroleum material in the Gulf area has continued to crop up.

A tight market on natural phenol was in evidence for over a year before the strike. With the strike going into its fifth week, this situation was expected to deteriorate even further. In some quarters, no improvement was expected for all of 1960.

Naphthalene and phthalic anhydride markets remain undersupplied. Imports of the latter are expected to be relatively heavy during August and September. Naphthalene imports, with the exception of material previously contracted for, will be light for the balance of the year bringing premium prices.

A midwest petrochemical producer announced that it would begin construction of a semi-commercial plant for the production of trimellitic anhydride. The new unit is expected on stream by the middle of next year.

Production of coke in the United States in June was reported by the Bureau of Mines at 6,043,665 net tons. The total was 5 percent less than the previous month's production, but 53 percent above production in June of last year. Stocks of oven coke continued to drop and, at the end of June, were equal to 14.7 days production.

The American Iron and Steel Institute estimated that steel production in the week ended August 16 would amount to 11.2 percent of theoretical capacity equivalent to 332,000 net tons of steel. Output in the previous week was 318,000 tons, 1,097,000 in the comparable week one month ago and 1,632,000 net tons in the corresponding week one year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 15, 1958
118.45	118.45	118.45	118.58

For Current Prices see page 10

Basic Products

Aniline—Tariff Commission reported total production of aniline last year at 101,404,000 pounds and sales of 32,151,000 pounds valued at $5,645000 for a per pound value of 18c.

Benzene—Due to the uncompromising nature of the steel talks, benzene consumers have been alert to any and all opportunities to maintain the big inventories they built up in the pre-strike period.

Buyers have benzene for current and nearby requirements, but the market for benzene for future needs has become increasingly difficult as cokeovens have been down for five weeks and the supply of petroleum material, not previously committed, has tightened substantially. The apparent shortage in the Gulf area has come as a surprise to many coaltar sources. They point to the fact that petroleum benzene is no longer available for export and that the shortage has enabled one southwest petroleum producer to move several tankcars of benzene at 33c. per gallon, 2c. over the market.

The Bureau of Mines reported cokeoven benzene production during the month of June amounted to 13.1 million gallons as against 14.3 million in the month previous, and 7.4 million gallons in the comparable month last year. Output of cokeoven material during the first six months of this year totaled 80.9 million gallons as opposed to 53.2 million in the like period last year.

Sales of cokeoven material during June amounted to 16.9 million gallons as against 14.3 million in the previous month and 7.4 million in the corresponding month last year. Sales for the January through June period this year totaled 80.9 million gallons as against 54.0 million gallons in the six month period last year.

Stocks on hand at producing plants at the close of June were 6.4 million gallons as compared with 11.9 million at the beginning of the month and 11.3 million gallons at the close of June last year.

Creosote—The market remained unchanged from previous report. Sources said that movement of creosote has been slow for many weeks and, in some quarters, it was felt that the steel strike could be held partially responsible. Railroads, to which the bulk of creosote goes for tie replacement, began to lay off workers almost at the beginning of the steel shutdown and carloadings have taken a nosedive, it was said. Thus, uncertainty in the industry could be reflected in the roads' maintenance schedules, it was pointed out.

m,p-Cresol—Tariff Commission reported m,p-cresol production totaled 17,970,000 pounds with sales of 14,156,000 pounds valued at $3,608,000 for a per pound value of 26c.

Of the total production, 7,230,000 pounds came from coaltar sources, while 10,740,000 pounds came from petroleum sources.

Sales of coaltar material amounted to 6,712,000 pounds valued at $898,000 for a per pound value of 13c.

Sales of petroleum material amounted to 7,444,000 pounds valued at $2,710,000 for a per pound value of 36c.

Naphthalene—The total lack of optimism in the steel talks thus far, leads coaltar sources to feel that the supply situation in this market will continue to deteriorate, if that is possible.

The mills have been down for five weeks and latest guesses as to when the strike will end range up to the end of September. While it is granted that a strike of such length would curb demand for naphthalene or any other chemical, sources say requirements will still be substantial especially in view of the huge steel inventories which the automotive companies have built up.

The current situation is summed up by one veteran observer's comment that, "anyone who didn't get (naphthalene) in early is out of luck."

Phenol—A tight market on natural phenol continues in evidence. Some sources see no improvement in the supply position for natural phenol during all of 1960. Stocks were continually tight for many months prior to the steel strike. Producers point out that although natural phenol sales are a relatively small part of the total market (44.1 million pounds last year as against 236.9 million pounds of synthetic) there are certain end-uses where consumers definitely require the natural.

Xylene—Coaltar production of xylene in the month of June amounted to 795,317 gallons as compared to 839,562 in the previous month and 645,900 gallons in the comparable month last year. Output in the first six months totaled 5,003,325 gallons as opposed to 3,977,400 gallons in the six-month period last year.

Dyes

Black—Neutral black 2B conc., color index number 27075 was newly quoted at $2.75 per pound as against the previous listing of $2.61. Spirit black RB was quoted at $3.89, a 35c. increase over the previous price of $3.54 per pound.

Green—Jade green NC supra double paste, color index number 59825, was lower at $1.50 per pound as against the previous quotation of $1.55.

Orange—Fast light orange 2G, color index number 16230, was reported at $1.39 per pound, up 10c. over the previous listing of $1.29, while golden orange GFD single paste, color index number 59700, was $2.70 per pound as compared with $2.58 previously reported. Flaming orange 6RD double powder, color index number 59710, was up 20c. per pound at $4.90.

Red — Diazo brilliant scarlet ROAD, color index number 17820 has been discontinued, and red 4BX conc., color index

Coal Chemicals

number 23500, is advanced 11c. per pound from $1.69 to $1.80.

Violet—Methyl violet base, color index number 42535B, was newly quoted at $1.88 as against previous listing of $1.76 per pound.

Intermediates

2-Aminopyridine—Price in 350-lb. drum lists at $2.50 per pound, f.o.b., works basis. Supply is adequate; demand, seasonally quiet. The material is used in organic synthesis and is an important intermediate in the production of sulfapyridine for the treatment of pneumococcal and streptococcal infections.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended August 16, was as follows:

Ammonia liquor	lbs.	112,495
Ammonium sulfate	lbs.	4,780,083
Benzene	gals.	440,115
Coaltar	gals.	2,615,033
Crude chemical oils	gals.	82,891
Toluene	gals.	106,574
Xylene	gals.	31,577

Cleve's Acid — Tariff Commission reported production of 1,6-Cleve's acid (5-amino-2-naphthalenesulfonic acid) for 1958 at 173,000 pounds. Output of 1,7-Cleve's acid (8-amino-2-naphthalenesulfonic acid) last year was 233,000 pounds, and production of mixed Cleve's acid (5 and 8-amino-2-naphthalenesulfonic acid) was 81,000 pounds.

Ethylbenzene—Output continues to be principally for captive requirements in the production of styrene monomer. The Tariff Commission reported production of ethylbenzene last year amounted to 1,176,965,000 pounds. Of this total, sales of ethylbenzene amounted to 15,755,000 pounds valued at $1,214,000 for a per pound value of 8c. Sources say ethylbenzene sold as such may go to the export market, or be sold between producers due to possible temporary production difficulties on the part of any one manufacturer.

3,4-Lutidine—Drum price is quoted at $15 per pound, f.o.b., works basis. Market was quiet. Supplies were adequate for modest trade needs.

Metanilic Acid—Price was quoted at 57c. per pound, drums, works, molecular weight basis of 173. Stocks were adequate for modest trade needs. The material finds use in the preparation of dyes and pharmaceuticals.

Tariff Commission report indicated production of metanilic acid during 1958 amounted to 1,564,000 pounds.

Phthalic Anhydride—The market continues undersupplied as a result of the shortage of raw material, naphthalene. There was felt to have been some slackening in pressure of orders on major producers, but this may be partially the result of the fact that buyers realize there is no hope of prompt shipment, and not likely to be any in the foreseeable future.

Imports are expected to be relatively heavy during August and September. One import source said the amount would be upwards of two million pounds. Phthalate plasticizers have been hit by the shortages also.

The steel strike, which cut off the supply of naphthalene was counted only one of the factors in the shortage. However, with the mills having been down for five weeks, and labor-management talks in the industry showing a very pessimistic tone, availability was not expected to improve over the balance of the year.

Styrene Monomer—The market was unchanged. Producers have reported continued high operating rates are being maintained in order to keep pace with requirements in the rubber and automotive industries. Demand for styrene monomer for use in GR-S rubber, in polystyrene, and in latex outlets has been well sustained.

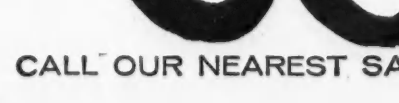
Tariff Commission reported production of all grades of styrene monomer last year amounted to 1,223,733,000 pounds. Sales were 682,727,000 pounds valued at $81,312,000 for a per pound value of 12c.

Trimellitic Anhydride — A midwest petrochemical firm announced that it would begin construction of a semi-commercial plant at Joliet, Illinois, for the production of "multi-million pound quantities of trimellitic anhydride."

The plant is expected to be on stream by mid-1960, according to the company, and is described as the first stage in a plan for full scale commercialization of this aromatic acid anhydride.

The material is expected to move into the protective coatings field where suggested uses are in making water soluble baking finishes and as a curing agent for epoxy resins.

Trimellitic anhydride was offered by the company in September of last year in developmental quantities from a new oxidation process in which the anhydride is produced from oxidation of trialkyl benzenes.



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Drugs, Fine Chemicals

General Services Administration, which sometimes gives trade people a jolt when it announces one of its frequent sales, was itself a bit disturbed last week. Reason: All competitive bids for approximately forty-one of the forty-two short tons of agar that the government has on the block were, in GSA's eyes, at least, too low. Consequently, the agency rejected the lot of them and, having decided to dispose of the material on a negotiated bid basis, invited bidders who participated in the competitive sale to make new offers by August 14.

GSA has two more sales coming up. One involves 13 million ounces of quinine—mostly sulfate powder—that is scheduled for this fall; the other 4,070 ounces of hyoscine that probably will be offered next January. In both instances, the agency has hit upon disposal plans that it hopes will prevent repercussions in worldwide markets. Some in the trade are less optimistic, however, especially when it comes to the quinine offering. The two million ounces that the government agency will require the buyer to remove from the stockpile during each twelve month period, is very likely to have an undermining effect on markets, they say, seeing that the threat of the sale has already seen quinine sulfate and hydrochloride prices drop appreciably.

Apparently, citric acid is a good business to be in. One of two domestic producers is currently winding up an expansion program that will more than double its present output capacity, and a Mexican firm, backed by a US chemical giant, has just announced that it expects to be in the citric acid business by next Spring.

The Mexican venture is pretty much cloaked in secrecy. Neither location nor size of the plant was disclosed. It was said only that the new facility will be able to take care of all the Mexican demand for citric acid.

Among drugs and fine chemicals, few price revisions have been recorded this summer. Most recent and notable changes were the substantial price advances for the four piperazine salts. New schedules, which went into effect August 3, are 10 to 11 cents higher than those previously quoted for 1,000 pound lots, and up to 28 cents per pound higher for smaller quantities.

Citric Acid—South of the border down Mexico way, construction is about to begin on what is reported to be the first fermentation-process citric acid plant in that country. Output of the new unit, which is expected to be completed by next spring, reportedly will be sufficient to take care of all the Mexican demand for citric acid.

In announcing the venture a week ago, the Mexican producer involved and its principal backer, a leading US chemical firm, preferred not to disclose either the location or size of the new plant. It is generally known, however, that the minimum capacity for an economic unit using either of two commercial fermentation processes is about 4 to 5 million pounds a year.

Citric acid was also a news item a fortnight ago, when one of two US producers reported that it had almost completed an expansion program that will more than double its present production capacity. Costing $3.6 million, the expanded facilities will probably see output go beyond 15 million pounds annually, a spokesman for the firm said.

Hyoscine—General Services Administration is offering 4,070 ounces of hyoscine. Current plans call for the material to be sold in lots not to exceed 1,070 ounces at intervals of not less than nine months. First offering probably will be made sometime in January.

Piperazine—Substantially higher prices for piperazine adipate, citrate, dihydrochloride and phosphate were posted August 3. New listings are 10c. to 11c. higher than those previously quoted for 1,000 pound lots, and up to 28c. per pound higher for lesser quantities. (For actual schedules, see OPD's Prices Current.)

Reasons for the action were not terribly clear but the logical motive appeared to be the poor profit return under the old prices.

Piperazine anhydrous and hexahydrate prices were not revised, and according to the majority of opinions, changes are unlikely immediately.

The piperazine salts have found a large (about 1 million pounds annually) and growing market in human and animal anthelmintics. Competition, to be sure, is not unknown in these areas.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 15, 1958
60.48	60.48	60.49	62.79

For Current Prices see page 10

Quinine—Up from 35,000 ounces in May, imports of quinine in June amounted to 73,576 ounces. West Germany supplied the bulk of this amount (53,576), The Netherlands the remainder.

Sources of the quinidine imported here the same month were West Germany (34,076 ounces), The Netherlands (25,233), and Sweden (4,416).

Recent reports found quinine sulfate and hydrochloride prices trending downward. Seen as the principal factors behind the decline: a keenly competitive market and the threat posed by General Services Administration's upcoming sale of 13 million ounces of government-stockpiled quinine.

For 1,000 ounces or more in a similar size container, quinine sulfate is currently priced at 24½c. per ounce, the hydrochloride at 23c. per ounce. These are said to be the most widely used of the quinine salts. Reportedly, only a limited market remains for the bisulfate which was widely used as an alcohol denaturant during World War II when other materials were unavailable.

Saccharin—Of the 24,218 pounds of saccharin imported here in June, Japan supplied 16,718 pounds, The Netherlands 7,500. These statistics from the Census bureau bear out earlier reports from trade members that imported material, principally from Japan, is exerting considerable pressure on the market. Incidentally, the Japanese stuff is reportedly selling at $1.30 to $1.35 a pound.

With the exception of March, June imports were higher than in any other month in '59.

Tartaric Acid—Demand for tartaric acid has been improving steadily, according to several trade reports, due to the fact that consumers have just about worked off inventories built-up earlier this year in anticipation of a higher tariff on imported material.

These same consumers may find themselves paying more for tartaric this fall. Certain dealers have already indicated that their replacement costs are rising but none could say yet exactly what this will mean translated into consumer prices.

Imports of tartaric acid in June amounted to 466,296 pounds, up from 283,101 in May, and the top figure for any month since February.

As usual Spain was the source of the biggest percentage of material arriving here in June—426,046 pounds. France was a poor second with 35,840, while Italy, almost out of the running, accounted for a mere 4,410 pounds.

Vitamins—From 49,001 pounds in May, imports of vitamins of other than animal origin rose to 80,437 pounds in June, which month, by the way, represented the high-point for imports during the first half of the year.

The Netherlands, accounting for 26,999 pounds, led off a long list of suppliers which included Japan (18,320), France (12,173), Italy (12,216), West Germany (4,595), Switzerland (4,188), Canada (1,000), Denmark (836), and the United Kingdom (200 pounds).

Vitamins, such as ascorbic acid, riboflavin, and thiamine, that get into foods and beverages are moving very well and somewhat better than those used mostly in pharmaceutical preparations, sources report. This is because pharmaceutical manufacturing activity is still a bit slow as is normal in mid-August.

After considerable price chopping earlier this year, producers have made no move to revise schedules since summer

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Drugs, Fine Chemicals

set in. Most of the trade indicate that prices have firmed up recognizably and expect that overall stability will characterize markets indefinitely.

Botanicals

Agar—General Services Administration rejected all competitive bids for about forty-one of the forty-two short tons of agar that the government has up for sale; too low, GSA complained.

Consequently, the agency discarded original plans and decided to dispose of the material on a negotiated bid basis. Bidders who submitted offers at the competitive sale were invited to make new offers by August 14. Offers from other than original participants were also welcomed.

When the agency first announced that it was going to offer agar out of the nation's stockpile, trade sources had different views as to the likely effect the additional material might have on the market. It would seem now that since GSA wants a "decent" price for the material, domestic schedules won't be too adversely effected.

Cascara Sagrada—Dealers here marked up the price of cascara sagrada bark, 2c., to 34c. a pound two weeks ago. This was the second price advance within a one month period.

Propelling prices upward, it's said, is the below normal yield of this season's crop in face of relatively good interest.

Chamomile Flowers—A European source tells OPD that Roman chamomile is cultivated only in Belgium and France and not in Germany and Italy as reported here several weeks ago.

According to the same source, Belgium is the source of approximately 80 percent of the world's supply of chamomile.

Gums—Markets for arabic, karaya, and tragacanth gums are described as very firm with all indications pointing to continued stability at the relatively high prices posted several weeks back. From all accounts, resellers here are doing a very nice business because many of their customers are fearful that shortages may develop before too much time elapses.

Importers, it's said, are bringing in little if any material at all. This is because prices at source for all three gums—but particularly for gum arabic—are especially high at the present time, and apparently importers have adequate supplies on hand to cover requirements.

Gum arabic prices which have headed steadily upward since word was first received that the Sudanese crop was running very short this season, remained unchanged last week at 28c. per pound for amber sorts, and at 33c. for powdered material.

Passion Flower Herb—Listed at 50c. to 55c. per pound, passion flower herb is now available but dealers warn that stocks are very small. Price activity is doubtful since the present level, established last winter, is considered quite high and fairly representative of actual market conditions.

Chemical Men May Get

—Continued from page 4

less modified on the floor the differences will have to be reconciled in conference.

Under terms of the finance committee bill, a state is barred from taxing an out-of-state corporation's income if the concern's business operations in the state are limited to solicitations of orders which are sent outside the state for approval or rejection and which are filled from stocks maintained outside the state.

The bill would permit the corporation to maintain offices within the taxing state for the convenience of the salesmen.

The house bill permits the states to tax the incomes of outside corporations only if the corporation maintains an office within the taxing state, salable inventory, a warehouse or other place of business in the state.

Under this bill, the corporation could not rent and furnish an office in the taxing state for its solicitors. The salesmen would have to make personal contacts with the customers or work out of a hotel room and not complete any sale until they had left the state.

Poland Digs

—Continued from page 5

—on an area of 500 acres, workshops, stores and a prefabricated elements establishment have been built already.

Work on the construction of the sulfur flotation and refining establishment, the sulfuric acid factory and the superphosphate factory is also considerably advanced.

The sulfur ore processing works constructed here will in 1961 produce 100,000 tons of pure sulfur, 400,000 tons in 1965 and a further increase of production is anticipated in the coming years.

In 1961 the sulfuric acid factory in Machow will open with a yearly production capacity of 100,000 tons. Later on it will be expanded and in 1965 will produce up to 500,000 tons of sulfuric acid. In 1962 a superphosphate factory will be opened with a procesing capacity of 200,000 tons yearly (in the coming years some 600,000 tons yearly).

Current plans provide for the extraction of about 100,000 tons of sulfur from the Piaseczno mine. This will systematically increase and will amount in 1965 to 2.2 million tons. Preparations are now in hand for the construction of a second sulfur mine in 1961.

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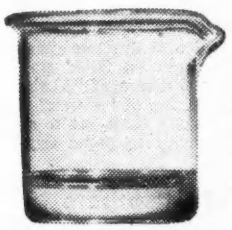

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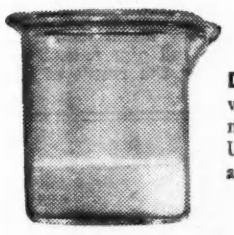

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Trade Name Chemicals

—Continued from page 43

and/or rosin combination used, Cyanamid says that **"Alwax"** and **"Waxine"** can be classified into two groups: acid stable sizes and alkaline stable sizes.

Acid stable sizes, states Cyanamid, are not affected by the addition of common chemicals generally used in paper making, as rosin, size, alum, starch, or clay. They are stable and do not precipitate over the acid pH range and enjoy considerable tolerance to alkaline conditions. This alkaline stability varies with the type of emulsion. For example, **"Alwax 251"** is stable at 8.0 to 8.5 pH but not above. **"Alwax 253"** is more satisfactory for higher alkalinites.

Alkaline stable sizes are sensitive to many electrolytes and will precipitate or floe upon the addition of most chemicals. Cyanamid claims that with a pH range of 7.5 to 10 these types of emulsions have good stability provided strong electrolytes are absent.

Cyanamid states that there are many benefits imported to treated papers by the use of **"Alwax"** and **"Waxine"** sizes. These include: printing paper sheets have fewer curly edges; wet-strength papers are more pliable and harder sized; **"Alwax 200** and **203"** increase water resistance, eliminate dusting on super calenders, and give a smoother coated surface with high gloss in standard and machine coating formulas; combined with starch, protein, modified celluloses, etc., on the size tub or calender stack **"Alwax** sizes eliminate paper surface fuzz without roll picking; the chalky feel and dusting characteristic of calcium carbonated filled papers may be reduced by addition of **"Alwax 253."** moderate quantities of **"Alwax"** sizes give higher test values than rosin size alone and without sacrificing paper dry strength properties.

Ultraviolet Absorbers

Although the sun is the source of all earthy life, it may likewise be a source of trouble causing such disturbances as burning of the skin, and degrading and discoloring many materials such as dyestuffs, paints, and pigments. These troubles are mainly the result of ultraviolet radiation. There have been developed ways to combat the effects of this radiation by means of absorbing and converting the ultraviolet rays to a harmless form of energy. An efficient ultraviolet absorber must have certain properties of which some are: stability to ultraviolet light when incorporated into formulations, compatibility with the medium being protected, absence of color and odor or nearly so, insolubility in water, and ability to dissipate the ultraviolet energy without causing harm to the medium being protected.

Stabilizers **"Mark LL"** and **"Mark KCB,"** manufactured by Argus Chemical Corporation, are vinyl heat and light stabilizers. **"Mark LL"** is a liquid barium-cadmium stabilizer whereas **"Mark KCB"** is a liquid barium-cadmium-zinc stabilizer. Both are described by Argus as being clear amber liquids in form and having a slightly aromatic odor.

Argus states that **"Mark LL"** is a general purpose stabilizer and recommends it for use in calendering, extrusion, injection molding, and solutions. Argus further claims that it is effective for use with all suspension homopolymer resins. One special property of **"Mark LL,"** states Argus, is the fact that, unlike most other barium-cadmium liquids, modification of the stabilizer system with zinc salts to compensate for resin type is generally not necessary when **"Mark LL"** is employed.

As for **"Mark KCB,"** **Argus** suggests it for application in vinyl formulations which require resistance to sulfide staining. It is said to be especially efficient as a stabilizer for plasticols and organasols

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and in all resins which tend to show a tolerance to the presence of zinc stabilizers. With the utilization of **"Mark KCB"** Argus says that vinyl compounds filled with a calcium carbonate filler will usually exhibit excellent heat stability characteristics.

Another advantage listed by Argus of these two stabilizers is their effectiveness in stabilizing formulations containing aryl phosphate plasticizers. Also, plasticizer choice does not appear to materially affect the heat stabilizing efficiency of either of the two products. Finally, Argus claims that **"Mark LL"** and **"Mark KCB"** are suitable for the stabilization of calendering compounds due to the fact that they provide freedom from calender plate-out and protect sensitive pigments against color shift during processing.

"Salol" (phenyl salicylate) is a light absorber produced and sold by Dow Chemical Company for over 35 years. It is said to be an effective ultraviolet light absorber, and has been successfully used in cellulosic, hydrocarbon, ester-type, and halogen-containing polymers. Colorless and nearly odorless Dow states that **"Salol"** has low toxicity, is readily soluble in most solvents, plasticizers, and monomers. It may be added to the monomer before polymerization dissolved in a plasticizer or solvent, or used as a liquid additive if warmed above 40°C.

According to Dow, **"Salol"** is indicated where a completely colorless product is required and a slight, pleasant odor is not objectionable. The company says that quantities of the absorber are used for stabilizing white saran monofilament, as well as in cellulosic, polyester, and hydrocarbon-type materials. Other possible uses suggested by Dow for **"Salol"** are in lacquers, adhesives, waxes, polishes and suntan oils.

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Fome-Cor Corporation's new plant at Addyston, Ohio, has begun full-scale production of "Fome-Cor" board.

"Fome-Cor" is a lightweight foamed plastic and paper sandwich material which has good cushioning and insulation properties as well as high compression strength when wet.

The company, formed earlier this year by St. Regis Paper Company and Monsanto Chemical Company, also operates a semi-commercial plant at Mt. Wolf, Pa.

Hercules Files for Tolerance

Hercules Powder Company, Wilmington, Del., has filed a petition with the Food and Drug Administration under the food additives law proposing a tolerance of twenty-five parts per million of 2,3-p-dioxanedithiol S,S-bis (O,O-diethyl phosphorodithioate) in or on dried citrus fruit pulp intended for use as cattle feed as a result of the chemical being used as a pesticide on the fruit.

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Obituaries

C. Warren Force

C. Warren Force, founder, former president and chairman of the board of Hydrocarbon Products, Inc., New York, died July 24 in New York. He was seventy-nine years old.

Mr. Force entered the chemical industry as an employee of the old Barrett Company, predecessor of Allied Chemical Company's Barrett Division.

He was with Barrett from 1898 until 1922 when he left to form Hydrocarbon. Mr. Force remained president of the firm until the end of World War II, at which time he relinquished that post and assumed chairmanship of the board, a position he held until his death.

Mr. Force was also treasurer of Old Colony Tar Company, and Tar Distilling Company, both of Sparta, N. J.

John G. Kirkwood

John G. Kirkwood, chairman of the chemistry department at Yale University and one of the top US scientists, died August 10 in New Haven, Conn. He was fifty-two years old.

Dr. Kirkwood was known best for his contributions to such subjects as properties of gases in relation to temperature and pressure, the statistical mechanics theory of solutions and liquids, the molecular structure of polymers, shock waves, and muscular contraction and relaxation.

Dr. Kirkwood was honored with the American Chemical Society award in pure chemistry in 1936, one of the youngest men ever to receive that prize. His other honors included the Theodore Richards medal of the northeast section of the American Chemical Society and the Gilbert Newton Lewis medal of the California section of the American Chemical Society.

He had been at Yale since 1951.

Earl B. Alboid, with the old Grasselli Chemical Company, Cleveland, Ohio, for forty years prior to its merger with E. I. DuPont de Nemours & Co., died August 10 in Florida. He was eighty-one years old.

Alfred Berghausen, retired president of E. Berghausen Chemical Company, Cincinnati, Ohio, died in that city on June 2. He was seventy-six years old.

William S. Bowen, founder of Bowen Engineering Company, North Branch, N. J., died August 11 in Westfield, N. J. He was seventy-three. One of the nation's top authorities in the spring-drying field, Mr. Bowen retired in 1951 as director of research of the firm he founded.

Dr. S. J. Lloyd, founder and dean emeritus of the University of Alabama School of Chemistry and Metallurgy died August 5 in Tuscaloosa, Ala. He was seventy-seven years old. Dr. Lloyd organized the school in 1928 and retired in 1952.

Israel Mintz, a member for twenty-five years of the sales division of Seggerman-Nixon Company, Long Island City, N. Y., died August 9 in Asbury Park, N. J. He was seventy-eight years old.

Dr. Suzanne G. Renard, a physician engaged in research and scientific translations for various pharmaceutical manufacturers, died August 3 in Geneva, Switzerland.

AEC Cozying Up

—Continued from page 4

verted to new uranium-233. The uranium-233 produced is then available to replace the fissionable material used during the reactor's operation.

The new program also involves a reorientation of work on the fluid fuel reactor program previously conducted for the commission by the Brookhaven National Laboratory, Upton, N. Y., and Babcock & Wilcox Company, Lynchburg, Va., on the liquid metal fuel reactor (LMFR) concept and by the Oak Ridge National Laboratory, Oak Ridge, Tenn., on the aqueous homogeneous reactor (AHR) and molten salt reactor (MSR) concepts.

Much of the work on these projects has been directed toward the development of reactors of these concepts for the production of economic electric power. During fiscal year 1960, research and development on the AHR, MSR, and LMFR concepts, except as applicable to the new program, will be discontinued and a transition of financial support made to the new program.

The commission's decision to reorient the fluid fuel program and towards implementation of the thermal breeder reactor program was based on the results of a study by a special task force of scientists and engineers convened by the commission in January, 1959, to make a comparison of the reactor concepts included in the fluid fuel program.

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Essential Oils, Aromatics

Damaging as the floods were last week to the inhabitants of the island of Formosa, they seemed to have had no effect on the citronella crop. This was the word from essential oil dealers at week's end as this publication went to press. The reason dealers don't believe the floods will cause prices to rise is this: A letter from a leading shipper in Formosa, dated August 8, said the devastating floods were concentrated in the southern portion of the island whereas most of the citronella is produced in Miaoli which is to the north and to the west of the disaster area.

Another factor leading local dealers to believe the effect will be insignificant is this: Material that the shippers have stored in warehouses in New York rose only infinitesimally last week over the previous week. If the plantings in Formosa had been severely damaged. the shippers would likely have seen fit to up the prices considerably due to higher replacement costs.

The Department of Agriculture Crop Reporting Board forecast mint oil production this year at 2,887,000 pounds. Peppermint oil output will be 2,224,000 pounds, 13 percent less than last year, but 24 percent above average. Spearmint output is forecast at 663,000 pounds, 34 percent above '58 production and 11 percent above average.

In other aeras, there were price advances. Algerian geranium went up 50 cents per pound and the Bourbon went up $4.50 per pound. Sandalwood, a strong market for a month or more, advanced in price at the rate of $1 per pound.

Rather suddenly, bois de rose derivatives dropped in price. For some weeks, bois de rose has been rumored to be weakening, but no specific price declines have taken place. The derivatives, however, are something else again. Linalool dropped 60 cents per pound; synthetic linalool dropped 50 cents per pound; linalyl acetate, 90-92 percent, dropped 20 cents per pound; linalyl acetate, 96-98 percent, dropped 50 cents per pound, and linalyl acetate, synthetic, dropped 50 cents per pound.

Price Trends

Advanced

Geranium oil, Algerian, 50c. per lb.
Bourbon, $4.50 per lb.
Sandalwood oil, $1 per lb.

Reduced

Linalool, 60c. per lb.
synthetic, 50c. per lb.
Linalyl acetate, 90-92%, 20c. per lb.
96-98%, 50c. per lb.
synthetic, 50c. per lb.

Comparative Price Indexes

(100=1949 average)

week	Prev. week	Last month	Aug. 15, 1958
147.46	146.96	146.09	145.79

For Current Prices see page 10

Essential Oils

Bois de Rose—For many weeks, no definite word has been received on the market status of the oil from Brazil and Peru. Early in the spring, there were random reports from source that the market was strengthening, but before this was felt on spot, there were more source reports that the market was weakening. And, in the midst of all this misinformation, the prices have remained stable. The current quotations are: Brazilian, $1.90-$2.55 per pound and Peruvian, $1.80-$2.30 per pound.

Bois de rose derivatives, however, have undergone noticeable price reductions. Both the linalool and the linalyl acetates are reported on fully under Aromatic Chemicals.

Camphor—Camphor sassafrassy is reported to be strengthening, according to a survey of New York essential oil dealers. The low of the range listed in this publication remains at 33c. per pound while the high rose from 55c. to 65c. per pound. The white material remains at its previously quoted range: 26c.-50c. per pound.

Citronella — Conflicting reports last week put this writer at a disadvantage in trying to describe the market conditions. On the one hand, there were dealers who said the market was weakening; and on the other, there were dealers who said it was strengthening. A third school of thought was that the market is stable and that price declines or advances are not likely in the near future. There was, however, a price advance. The low of the range used to be 65c. per pound for material from Ceylon, but now it is 70c. per pound.

By way of historical account, today's citronella prices are relatively low. According to the OPD 1959 Chemical Price Issue, citronella was highest (during the seven years the issue has been in existence) in 1954 when it cost $1.25 per pound. Its lowest was in 1953 when it could be bought for as little as 48c. per pound.

Taking into account only the low of the range of the past seven years, today's price is higher than '53 and lower than '54. In 1952, it was 53c. per pound; 1958, 48c.; 1954, 60c.; 1955, $1; 1956, 66c.; 1957, 70c., and 1958, 58c.

Geranium—Last week, once again, geranium oil was spotlighted. And, as usual, the spotlight showed a price advance. Algerian geranium advanced from its previous level, $20-$23 per pound to $20.50-$24 per pound. Bourbon geranium advanced from its previous level, $20.50-$25 per pound to $25-$29.50 per pound.

As has been the case in the past, these high prices might be considered misleading. A number of the dealers who had quoted lower prices are now out of the geranium business and do not plan to handle more material until the price drops considerably. Other dealers have material, but their fear of still higher replacement costs has caused them to be reluctant to part with what they already have.

It is interesting to note that the Reunion islands produce the greater part of the world's total supply. (This type is listed in OPD as Bourbon oil.) And, according to reliable agricultural information, one of the most troublesome handicaps the geranium distillers have to face is the lack of water, especially running water, in a number of the producing regions. Along the roads there are often seen water tanks from which the villagers draw their supply. The procedure is for them to collect the water in tin cans which they attach to a pole that they suspend across their shoulders.

Distilleries are sometimes located conveniently near a spring or brook but most distillers find it more advantageous to locate their distilleries in the fields. When they do this, they must then haul water long distances to the distillery. But most of them have found this more satisfactory than putting the distillery near running water and then hauling the bulky plant material far away.

The material is distilled immediately after harvest and, since most of the plants of one field bloom at about the same time, a good deal of herb material is available all at once. For this reason, distillation often goes on day and night.

Peppermint—Once again, the price remained at its previous level, but dealers in the New York area speculate that soon as the new crop is on the market, prices will come down. The current price is $3.45 per pound.

A quick check back to last year's mid-August issue shows that peppermint natural was selling for $4.50 per pound. The low price for all of 1958, according to the OPD Hi-Lo Chemical Price Issue was $3.60 per pound. Previously, it had ranged from $4.25 in 1957 to $5.75 in 1955. So the current price, $3.45 per pound, is the lowest peppermint natural has declined in the seven years the Hi-Lo covers.

Spearmint—According to reports from the dealers, virtually the same conditions prevail for spearmint as do for peppermint. The price remains at $5.10 per pound, but it is expected to fall once the new crop is on the market.

Spearmint, however, is at a relatively high level on the basis of the seven-year OPD Hi-Lo Chemical Price Issue. For example, it was selling for $3.65 per pound in 1958 and only $3.90 per pound in 1957. In fact, the only years (during the seven years covered by the Hi-Lo) that it was higher than it is today was back in 1953 when it was selling for $5.70 per pound and in 1952 when it was up to $7.25 per pound.

Sandalwood—Dealers report that there is relatively very little wood on spot and that the price went up again last week.

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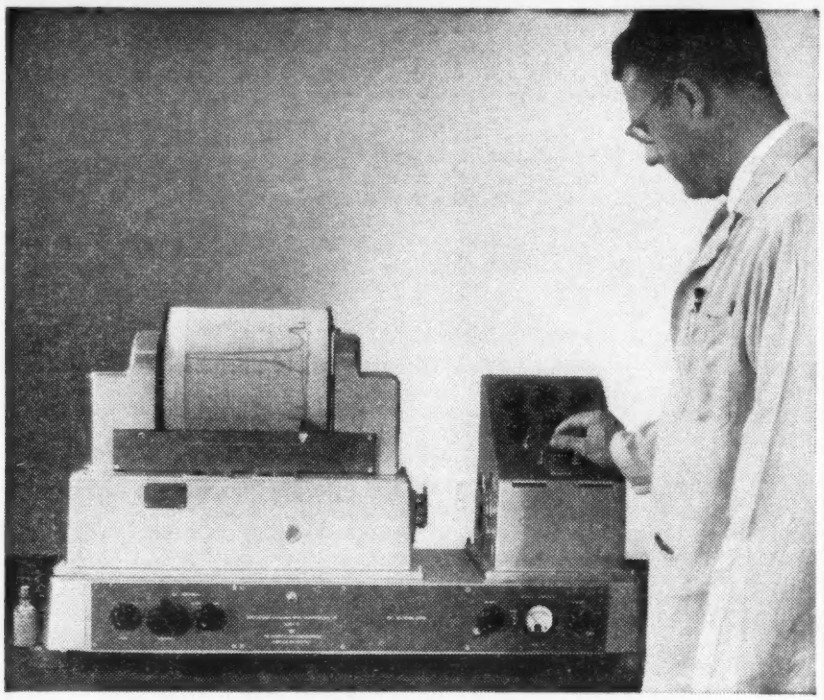

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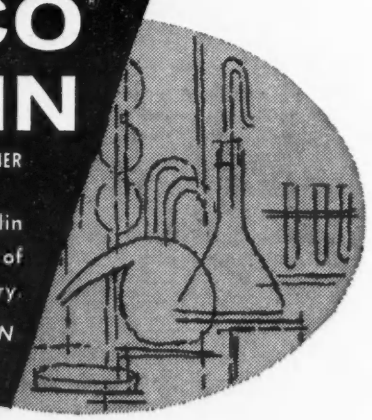

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Essential Oils

From the previous level, $13.50 per pound, it climbed to $14.50 per pound. Outside price rose from an even $16 per pound to $16.50 per pound.

As has been reported in the past in this column, the sandalwood industry in Mysore is closely regulated by the government. Every tree belongs to the government whether it is grown on public or private grounds and the law requires every person on whose property a sandal tree grows to give it the best of care.

Trees are planted and cared for according to specific government regulation, but when the time comes for cutting trees, contractors bid for the jobs. The government forest officials mark the trees and transport the wood to government stations.

The felled trees are taken through the forests, over roads and finally over railroads to the forest service warehouses which are distributed throughout the producing regions.

But the material is valuable and there is great danger of theft. Guards patrol the forests and have the right to search any vehicle they might suspect of hauling away sandalwood. The wood, however, is not too easy to conceal because of its pungent odor. Aware of this, some of the would-be thieves hide the wood among sacks of coriander seed or onions, but such tricks are familiar to the forestry inspectors.

Aromatic Chemicals

Linalool — The material derived from bois de rose declined in price last week. It was formerly listed at $3.50 per pound and now it is $2.90 per pound. According to the OPD 1959 Chemical Price Issue, this is the lowest it has been in the seven years the issue covers. Last year it was $3.50 per pound and back in 1955, it was selling for as much as $6 per pound.

The synthetic grade, also declined in price last week. It dropped from $3.70 to $3.20 per pound.

Linalyl Acetate—The 90-92 percent material dropped in price last week from $3.25 to $3.05 per pound. The 96-98 percent material dropped from $4.10 to $3.60 per pound and the synthetic material dropped from $3.70 to $3.20 per pound.

Vanillin—The market is stable and prices remain at their previously quoted levels. Dealers report no increase in business as a result of the sky-rocketing vanilla bean prices. At one time there was speculation that high vanilla bean prices would precipitate high vanillin prices, but such has not been the case.

Seeds and Spices

Red Pepper—Demand for grinding and crushing grades is steadily increasing and prices are rising as spot reserves are sinking to their lowest in years.

White Pepper—Prices are said to be moving upward gradually and supplies are said to be diminishing.

Essential Oil Companies

—Continued from page 7

There are no more menthol smokers today than there were a year ago, he declares flatly.

But concrete facts from the cigarette companies are difficult to come by. Always a hush-hush lot, they are even more so where menthol and other flavors are concerned.

A sales manager for one of the leading flavoring producers says, however, that he has noticed more and more interest in flavors on the part of tobacco men during the past six months. This, he adds, has been especially true since so many cigarettes must be puffed through long powerful filters.

Filter Brings Cheaper Tobacco

For, with the advent of the filter, has come the use of cheaper-grade tobacco—made up of ground stems and broken leaves mixed with a plasticizer to make it stick together. This lower-quality material, called processed tobacco, sometimes accounts for as much as 15 percent of the tobacco that goes into the cigarette.

And, points out the flavor man, it just naturally follows that cheap tobacco filtered through cellulose isn't going to taste very good. So the cigarette companies are coming to rely more and more on flavors they can add.

This brings up two novel ideas:

- Make the cigarette just a little more tasteless and persons who wish to do so can stop smoking effortlessly.
- Since so much of the natural flavor of the tobacco is lost—either diluted with cheap material or filtered out—why not make a cigarette without tobacco?

One suggestion is to replace the tobacco with a combination of nine vegetable fibers, chemically-treated and processed with an incense-like aromatic flavoring.

Still another tobacco-less cigarette is the brainchild of the engineering staff of a machine company. Now reported to be in the works is a machine that will make cigarettes without using tobacco.

The last word on the subject is from an essential oils dealer, speaking as a smoker. He has this to say:

"There has to be a saturation point. A cigarette can have but so much filtering, flavoring and menthol.

"It all has to stop somewhere and I predict that the cigarette of the future won't be new-mown-hay-smelling, but tobacco-smelling.

"We'll get right back where we started from—plain tobacco with a minimum of flavor additives."

Color Users Feel

—Continued from page 5

—and the same would be true under the color bill—any additive that is capable of producing cancer is barred from use in foods or feeds. It has already operated to freeze present formulas for animal feeds containing diethylstilbestrol and arsenical compounds approved under the new drug law so that even a minor change can not be made in the processing of these feeds.

Last week, FDA moved to ease this situation somewhat by amending its regulations to make the filing of supplemental applications unnecessary under certain conditions. Two new sections were written into the regulation as follows:

Supplemental Application Not Needed

"(b) The submission of a supplemental new drug application is not required for changes made in the new drug, or in its labeling, or in the manufacturing facilities, or controls under which it is produced, that are not significant from the standpoint of the safety of the new drug as established by the original new drug application. The holder of an effective new drug application should submit to the new drug branch, in writing, full details of any proposed change or changes, and he will be notified in writing whether, in the Food and Drug Administration's opinion, a supplemental application is required for such change or changes.

"(c) A supplemental application is not required when the article is no longer a new drug, under the labeling submitted in the new drug application, unless the proposed change itself causes it to become a new drug."

What Delaney's Office Told OPD

When queried last week by OPD, the office of Rep. Delaney said that the congressman was acquainted with "consternation" his carcinogen amendment has caused in the animal feeds industry but gave no indication he favored any change in it.

His office said that there are economic arguments against the use of diethylstilbestrol in cattle feeds as well as arguments for it. They said that not all ranchers favored this chemical in the feed because it tended to add moisture weight to the cattle and when the cattle are placed on corn feeding for "conditioning" the moisture weight is lost and it is necessary to feed the cattle larger quantities of corn to prepare them for marketing.

Rep. Delaney's aide also commented that cancer experts do not think that there is any safe level for carcinogens and that was the reason why Mr. Delaney's amendment prohibited the use of carcinogens "by whatever route administered."

While the Cancer Institute has never issued any statement of policy on whether tolerances can be established for carcinogens, an official said last week that he did not believe that with the present state of knowledge a safe level for carcinogens can be determined.

A special task force in the drug industry is presently at work searching through the scientific literature and consulting with experts to determine if there is any scientific evidence that will support tolerances for known cancer-producing products.

FTC Counsel Named

Daniel J. McCauley, jr., has been named general counsel of the Federal Trade Commission, succeeding Earl W. Kintner who was recently appointed chairman of the commission. Mr. McCauley has been serving as associate general counsel of the Securities and Exchange Commission since 1956.

Data Offered

Antara Chemicals, a sales division of General Aniline & Film Corporation, New York, has published a booklet describing the effectiveness of **polyvinylpyrrolidone (PVP)** in reducing the toxicity and sensitivity problems inherent in phenols and other compounds. Experimental data summarized in the booklet shows how PVP tempers the effect of certain poisons, drugs, detergents and germicides, and points the way for its use in industrial preservatives, cosmetic preparations, disinfectants, weed killers and insecticides. Copies of the eight-page booklet (TA-52) are available by writing to Antara at 435 Hudson street in New York.

Dow Chemical Company, Midland, Mich., has brought out the third edition of a twenty-four page bulletin, **"Choosing the Right Polyglycol."** The booklet lists for forty polyglycols the formula, description, average age molecular weight, specific gravity, pounds per gallon, refractive index, pour, flash, and fire points, approximate solubility, viscosity in dex, and viscosity in centistokes. Copies are available by writing to Dow's technical service and development at Midland.

Fries & Fries Inc., Cincinnati, Ohio, has issued a four-page folder describing a representative number of **flavoring compounds** developed by the firm. Copies are available by writing to the firm's Cincinnati offices at 110 E. 70th street or the New York office at 418 east 91st street.

Linde Company, a division of Union Carbide Corporation, New York, has issued a data sheet on a new line of **lightweight missile regulators.** Linde says the new regulators, designed for use in rocket and missile engines, provide a solution to many of the fuel pressurization problems encountered in the operation of modern missiles. All the new regulators, it is pointed out, are small and of extremely lightweight construction. Copies of the data sheet are available by writing to Linde at room 2840, 410 Lexington avenue, New York, 17.

Hooker Chemical Corporation, Niagara Falls, N. Y., has issued a revised edition of its bulletin, **"Hooker Type S Cells."** The bulletin gives a brief history of the development of the Hooker electrolytic chlorine-caustic soda cells. Also contained are general operating performance and typical operating data; a flow sheet of a typical caustic-chlorine plant using Hooker cells, and a description of cell operation and renewal. Copies are available by writing to Hooker at Box 344 in Niagara Falls.

Manufacturing Chemists' Association has issued a new chemical safety data booklet covering **handling technics for industrial users of vinyl acetate.** Sections of the data sheet cover the physical properties of vinyl acetate, potential hazards, engineering control, employee safety, fire fighting, labeling transportation, handling, storage and first aid. Copies of the booklet, "SD-75, Vinyl Acetate" may be obtained at 30 cents each by writing to MCA at 1825 Connecticut avenue, N.W., Washington 9, D. C.

General Dyestuff Company, a sales division of General Aniline & Film Corporation, has published an eight-page circular dealing with the properties and applications of its new **"Inanthrene Corinth B Infra Paste."** In addition to information on working properties, application data, and fastness property, the booklet contains vat dyed cotton and rayon color swatches showing the various shades that may be obtained with the new dye. The circular (G-806) may be obtained by writing to General Dyestuff at 435 Hudson street, New York 14.

Engineering Materials, New York, has issued a twelve-page booklet on **heavy liquids.** Both aqueous and organic liquids are described and for the higher ranges suspensions of mercury in a heavy liquid. Copies are available by writing to the firm at P. O. Box 363, New York 8.

DuPont Starts Push

—Continued from page 4

the Spruance textile fibers plant, which are now situated in the buildings to be used for polyethylene film manufacturing.

DuPont's polyethylene film pilot plant at the Sabine River Works, Orange, Tex., is now turning out packaging film which is said to combine high impact strength with excellent appearance and printability. But this film will be available only in limited quantities until startup of the new facilities at Richmond, duPont notes.

The company is now producing polyethylene film for industrial and agricultural applications in commercial quantities at its Yerkes film plant in Buffalo, N. Y.

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Coatings Materials

The only price activity on the horizon in the materials covered by this section of OPD is an announcement of certain price advances to become effective Sep. tember 5 on some of the aqueous dispersed pigments. Some upward adjustment will be made on some dispersed items at that time, but most of them remain unchanged. Those which will advance will undergo a change of 10 cents per pound on most items, with larger increments on just a few.

Paint manufacturing business has been running at a good rate during the second quarter, but is now in the so-called summer slump from which it is expected to emerge soon after Labor Day. Right now automotive production has virtually halted for model change-over and retooling, which cuts substantially into industrial business.

Just what effect the steel strike will have on the fourth quarter paint business is a matter of the duration of the strike. If it extends significantly beyond Labor Day, the feeling is that all metal fabricating industries will have to curtail output, and this would, of course, be reflected in lower industrial finish volume.

In addition shortages of raw materials derived from coal will tighten more critically and hamper paint product output. Alkyds and plasticizers will tighten significantly. Maleic resins are now short, and are expected to remain so through the first quarter of 1960.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 15, 1958
103.03	103.03	103.04	101.45

For Current Prices see page 10

Prime Pigments

Dry Colors—Some upward price adjustments have been found necessary on certain aqueous pigment dispersions. No producer has increased his whole line, but only made occasional changes where cost factors required it. The new higher prices will not become effective until September 5, 1959.

Among the yellows, one super toluidine dispersion advanced from 60 cents to the new price of 65 cents. All other yellow changes were 10 cents per pound. Most of the toluidine types were not advanced at all. There are no changes in dispersed greens. Only one orange moved up 10 cents per pound.

Regular jet blacks were advanced 5 cents per pound, but the premium jet black held unchanged. There were no price changes in aqueous dispersed blues. Out of a wide line of dispersed reds, only two were changed, the madder lakes moving up 12 cents per pound. A dispersed maroon jumped sharply by moving from 89 cents per pound to $1.40. There were no changes in any geographic or quantity differentials.

Dry color pigments held firm and unchanged.

A major pigment producer has just announced a line of silk screen daylight fluorescent colors in two series. One series consists of the more permanent type for lengthy exterior exposure, made up of two yellows, two oranges, two reds, a pink and a green. Prices range from $1.35 per pound to $1.80 depending on color.

A second series is lower priced and designed for general poster and bulletin colors and silk screen applications where maximum permanency is not required. This series is priced from $1.15 to $1.60 per pound depending upon color and pigment, and consists of two yellows, two oranges, two reds, a pink and a green.

Titanium Dioxide—Sustained heavy demand is reported on this pigment. Good business volume was maintained during the summer months, and a sharp pick up for fall is expected. Price patterns long established are expected to hold firm and carry over into the fourth quarter.

Coatings Shipments, Output: June

	Factory shipments, Dollars		Reported production, Gallons	
	May	June	May	June
Trade sales	104,100,000	103,500,000	34,700,000	32,800,000
Industrial sales, total	68,900,000	55,000,000	29,900,000	24,600,000
Paint and varnish	51,800,000	40,900,000	22,600,000	18,300,000
Lacquer	17,100,000	14,100,000	7,300,000	6,300,000
Overall totals	173,000,000	158,500,000	64,600,000	57,400,000

Total sales, Jan.-June $910,300,000.

* Detail does not add to total because some respondents reported only total production without indicating allocation as to trade or industrial outlets.

Lacquer Materials

Plastic demand for phthalate esters is said to be holding up good, with lacquer demand seasonally off, but expected to spurt in the fourth quarter. It is just as well that demand at this point is off a bit, because with phthalic anhydride market severely tight, the alkyl ester plasticizers have become more snug. Price levels are said to be well maintained.

As far as the overall plastics industry is concerned, the steel strike has helped rather than hindered, because of demand for plastic fabricated items that can be used as metal replacements. However, this added plastics boom is of the type that does not involve products of great flexibility, and hence is no great boon to the plasticizer business.

Synthetic Resins

Alkyd Resins—Buyers were as yet not too much concerned with the availability of alkyd resins, despite the phthalic anhydride shortage. The feeling seems to be that as soon as the steel strike is settled, relief in the tight supply situation will be almost immediate.

The matter of price trends was uncertain. The expectation is that phthalic anhydride is likely to advance by the year end, if not at the quarter. However, this may not affect the price of alkyds, because costs will drift lower in the weeks immediately ahead as new crop oils become available and depress vegetable drying oil prices. The latter are generally more of a cost factor in alkyds than is the polybasic acid portion of the molecule.

The domestic castor oil crop this year is good, and felt likely to force lower foreign prices for oil. The soybean crop is good, but the position on linseed is uncertain. Generally overall lower oil prices are expected, however.

Epoxy Resins — Coatings based on epoxy resins in either one or two component systems are becoming more wide spread in usage. Particularly in this true where tough films of better resistance to acids, alkalies, and chemicals are concerned. Excellent adhesion, flexibility, and impact resistance are also obtained, particularly with two component formulations which provide films higher in the desirable epoxy characteristics. Prices are firm and unchanged.

Nitrocellulose—Ester soluble and alcohol soluble grades were amply available. Demand is now seasonally off, but expected to pick up after Labor Day, provided that the steel strike is not prolonged much beyond that date, otherwise, metal products such as office furniture and the like will be in a situation where output will have to be curtailed for lack of sufficient metal. This, of course, will cut down correspondingly on demand for finishes.

Maleic Resins — Maleic resins are in short supply because of the shortage of

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Coatings Materials

maleic for polyester resin manufacture maleic for polyester rosin manufacture has thrown the market into a position where demand for the anhydride exceeds capacity to produce.

Long term, of course, the supply situation is expected to be relieved by new production facilities. In fact, production facilities are being over expanded. Meanwhile, maleic will remain on the short side until sometime in the late first quarter or early second quarter of 1960.

Inert Pigments

Clay—The various grades of clay used as extenders in certain paint products were readily available in any quantity for prompt shipment. Demand was off a bit in line with the usual seasonal summer slump, but expected to undergo a fall pick up. No price adjustments have been made recently, and none are expected.

Mica—Wet ground mica tended to hold its own preferred place in house paint formulations as part of the extender pigment combination by reason of certain durability characteristics which it imparts. Both air ground and wet ground materials were amply available. Prices are firm and unchanged.

Talc — Magnesium silicate pigments continue to dominate the extender pigment market for outside house paints, and more recently to capture significant parts of the market in other type finishes with their newer fine particle size materials. The latter can be used in enamel products without adversely affecting gloss and texture, and yet contribute to finish quality and performance in a way not previously available.

Natural Resins

Shellac—Trading continued slow last week, and prices remained just about as they had been. The summer slump is expected to end about late September, and demand should pick up sharply. Just what the price situation will be at that time is uncertain. Primary market quotations are higher than American buyers at this time are willing to pay, but buyers in other countries seem to be taking the stuff. American buyers may have to eventually pay higher prices.

Miscellaneous

Casein—While buying interest was said to have improved during the last couple weeks, prices remain essentially unchanged. Argentine material ranged from 19¼c. to 19¾c., and New Zealand at 24c. to 25c. per pound in the New York area.

The currently better demand is primarily attributed to plants reopening after vacation shutdowns, and a generally stronger undertone to the market.

Glue—Price patterns established in late July and early August on hide glues were regarded as firm. At that time prices advanced 1 cent per pound across the board. Despite foreign competition, the price advance stuck, and is expected to hold. Domestic manufacturers have long been struggling against cheap foreign competition, from which no significant relief via government protection seems available.

Naval Stores

The supply position on naval stores is expected to ease notably in the weeks immediately ahead. Rosins are in good demand, but turpentine trading remains spotty.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Aug. 7	Mon. Aug. 10	Tues. Aug. 11	Wed. Aug. 12	Thurs. Aug. 13
Drums—					
K	...	...	...	$9.10	...
M	$9.14	...	...	...	...
N	...	...	$9.08	...	...
WG	...	$9.32	9.41§	9.23§	$9.01
WW	...	...	...	9.52§	9.55
Bags—					

Tankcars (for week ended Aug. 13)—
WG, $8.65; WW, $8.70; N and below, $8.60

Sales, USDA
1,162* 852* 673* 1,324* 3,158*

New York
(Per 100 lbs., c.l., Friday)
WW, $10.40; WG, $9.85; N, $9.80; K, also M, $9.75

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.533§	...	.539§	.538	.545
Sales	24,000¶	...	22,000¶	16,000¶	16,000¶

* Drums equivalent. ¶ Gallons. § Average price.

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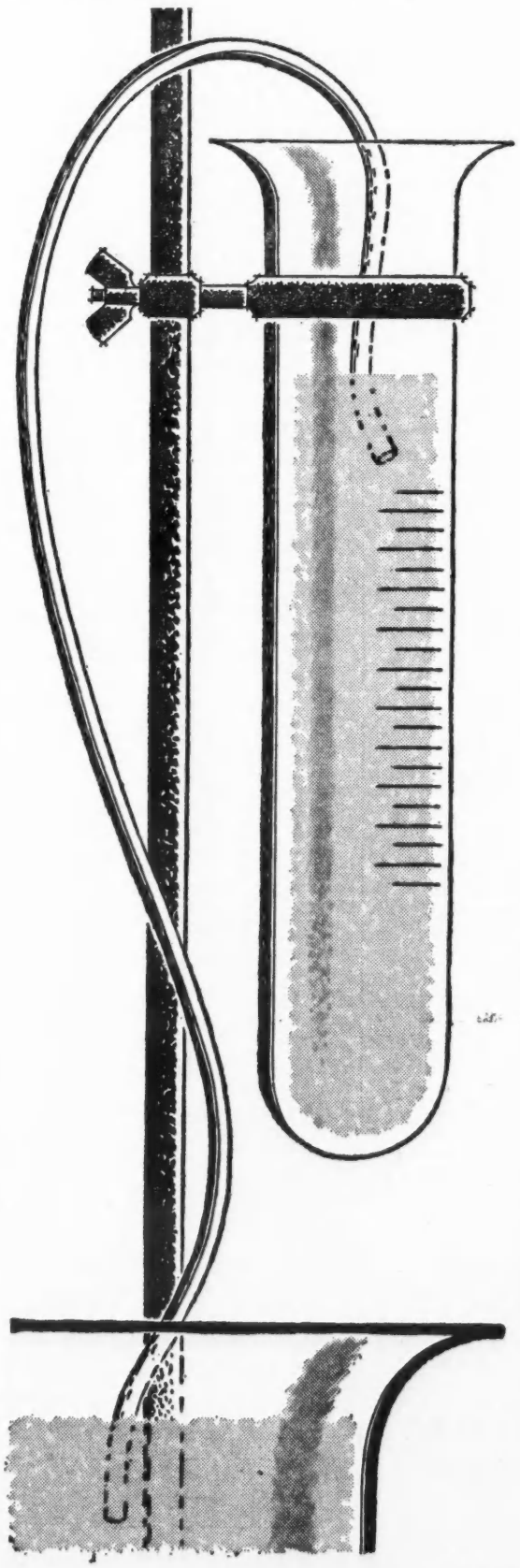

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CITY ZONE STATE

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Oils, Fats and Waxes

An easier tone prevailed in the oils and fats market last week. Slow demand unsettled the market and all price changes were on the downside, except tung oil, which was fractionally higher. Lower future markets affected cash oils and resulted in fractional declines in corn, cottonseed and peanut oils, while soybean was irregular but steady. Crude coconut oil also was easier, with trading noted at lower levels on the Pacific coast for prompt delivery, while the New York market was dull and nominal.

Lower cost of basic materials, combined with slackened demand, resulted in a drop of 2 cents per pound in coconut oil fatty acid and ½ cent per pound for oleic, stearic and tallow fatty acids.

Light trading was noted in greases and tallow for domestic delivery. Export business continued to lag. Prices were without change and fairly steady, except for edible tallow and choice white grease. Lard was weaker and loose lard reached the lowest level since 1941.

Tung oil was the only oil that advanced last week. Demand was more active and prices were raised about ¼ cent per pound. Brazilian castor oil was easy and sold at ¼ cent lower. Linseed oil remained unchanged and firm, reflecting the strength of flaxseed and good demand for prompt needs. Oiticica oil was quiet, but well held.

Slight improvement was reported in export demand for crude menhaden oil, while domestic interest was limited. Oil production was still affected by the lean fish yielding low percentage of oil.

Smaller stocks strengthened linseed meal and market advanced $2.50 to $3 per ton, while soybean meal was lower, off $1.50 per ton for prompt delivery.

Price Trends

Advanced

Linseed meal, ext., $2.50-$3 per ton.
expeller, $2 per ton.
Tung oil, ¼c. per lb.

Reduced

Castor oil, No. 1, Braz., ¼c. per lb.
Cocoa butter, ½c. per lb.
Coconut fatty acid, 2c. per lb.
Coconut oil, crude, ¼c. per lb.
Copra, $5 per ton.
Corn oil, foots, 95%, ¼c. per lb.
Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Cottonseed oil, crude, ½c. per lb.
Refd., ½c. per lb.
Lard, cash, 3/10c. per lb.
Oleic acid, ½c. per lb.
Oleo stearine, ½c. per lb.
Peanut oil, crude, ½c. per lb.
Refd., ½c. per lb.
Soybean meal, $1.50 per ton.
Soybean oil foots, ¼c. per lb.
Tallow, edible, ¼c. per lb.
Tallow, fatty acids, ½c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Aug. 15 1958
112.79	112.35	114.81	111.79

For Current Prices see page 10

Vegetable Oils

Castor—Trading was confined to actual needs. No. 1 Brazilian was easy, with sales at 16¾c. per pound, tankcars, New York, prompt delivery. Domestic grades were unchanged.

Import of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	127,500	4,008,000
Previous week		2,674,000
Corresponding week, 1958	317,400	1,180,000
Total this year	15,700,450	61,108,000
Corresponding period, 1958	9,358,900	48,707,000

Coconut—Crude was unsettled and trading took place at 15¾c. per pound, tankcars, f.o.b. Pacific coast, nearby shipment; 15½c., August and 15⅜c. September. The New York market remained nominal at 17½c. to 17¾c., tankcars, as to delivery.

Corn—Buying interest was restricted to actual needs. Crude was sold at 11½c. per pound, tankcars, f.o.b. mills. Refined was quoted at 15.23c., tankcars, New York, prompt delivery.

Cottonseed—Futures were weaker as a result of liberal liquidation, chiefly in the September delivery on the New York Produce Exchange last week. March, May and July deliveries reached new seasonal lows. The market was unsettled by easier allied markets, combined with bearish government soybean crop report and continued favorable progress of the cotton crop. Cash oil was quiet and lower. Refined salad was reduced to 14¾c. per pound, tankcars, New York, prompt delivery. Pakistan purchased 1,000 metric tons of refined cottonseed oil last week.

Interest in crude oil was reported slow. Old crop was easier and off fractionally. In the southeast tankcars were quoted at 11⅞c. per pound, nearby; 11½c., August; 11c., September and 10½c., October-December. In the Valley, nearby was nominal at 11¾c.; 11¾c., August and 10¼c., October-December. In Waco, Texas, 11½c., August; and 10⅜c., October-December.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, August 14, follow:

	Sales	High	Low	Close
		Cents per Pound		
Sept.	521	13.45	12.75	12.98S
Oct.	121	12.75	12.19	12.34S
Dec.	313	12.48	12.05	12.14S
March	127	12.40	12.07	12.11S
May	60	12.42	12.10	12.10S
July	13	12.14	12.05	12.01@12.05

Total sales and switches, 1,155 contracts.

The Department of Agriculture last week issued an authorization to Argentina for the purchase of $25.6 million of soybean or cottonseed oil. Approximately 84,000 metric tons of oil will be involved in the deal. Contracts eligible for financing range from August 17 and December 31, and delivery, August 17 to January 31, 1960.

The cotton crop was estimated at 14,815,000 bales as of August 1 by the Department of Agriculture, an increase of 29 percent above last year's production of 11,512,000 bales and 10-year average of 14,046,000 bales.

Linseed—This market remained steady and unchanged. Raw oil was maintained at 12½c. per pound, tankcars, Minneapolis, August-November and 14c., exwarehouse, New York basis. Trading was restricted to nearby delivery and withdrawals against contracts continued in good request.

U.S. exports of flaxseed and linseed oil declined sharply in the marketing year ended June 30, 1959, but exports of linseed cake and meal increased substantially, according to the Foreign Agricultural Service.

Linseed oil exports came to only 8 million pounds—less than one-tenth the 1957-58 shipments. Almost 85 percent of the total moved out in the last half of the marketing year. The Netherlands took 70 percent of the oil exports.

Exports of linseed cake and meal totaled 14,394 tons. While this was one-fourth more than in the previous year, it was less than one-fifth the tonnage exported in 1956-57. The Netherlands and West Germany took 85 percent of the 1958-59 shipments.

Flaxseed exports totaled 6 million bushels and were 3 million less than in the previous year.

Flaxseed—Strength persisted in this market, influenced by crusher and exporter competition for limited offerings and a bullish government crop report. Production estimate dropped 5 million bushels from the July figure and trade sources report that additional deterioration has occurred since August 1. Official closing prices were unchanged at $3.25 a bushel, spot and to-arrive, basis Minneapolis, but most trading in the spot market was at additional 5c. premium.

The flaxseed crop August 1 estimate was reduced to 23,231,000 bushels by the Department of Agriculture from 27,596,000 bushels the previous month. The production in 1958 amounted to 39,453,000 bushels and 10-year average was 39,700,000 bushels.

Palm Kernel—Primary markets were firmer and shipments were lifted to 14¼c. per pound bulk, c.i.f. for October arrival.

Peanut—Crude was lower, with trading at 11½c. per pound, tankcars, f.o.b. mills, southeast, for prompt shipment. Refined declined to 15c. per pound, tankcars, New York, prompt delivery.

Peanut crop as of August 1 was estimated at 1,796,995,000 pounds by the Department of Agriculture. This compared with 1958 production of 1,835,800,000

Oils, Fats and Waxes

pounds and 10-year average of 1,642,502,000 pounds.

Soybean—This market was irregular, closing firmer. Crude was bid at 9¼c.

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Refined salad was quiet and available at 11½c. per pound, tankcars, New York basis.

Soybean crop was estimated at 531,439,000 bushels as of August 1 by the Department of Agriculture. The 1958 production totaled 574,412,000 bushels and 10-year average was 326,020,000 bushels. Yield per acre was placed at 24.2 bushels, the same as last year and the 10-year average was 21.0 bushels.

Tung—This market continued strong and advanced fractionally. Sales were reported at 22¾c. per pound, tankcars, New York, prompt delivery, with sellers holding at 23⅞c. to 24c. for nearby and later delivery. Domestic oil also was firmer ranging from 22⅞c. to 23c., tankcars, f.o.b. mills, as to seller.

Mainland China's tung oil supplies for export this year are believed to be somewhat below those of 1958, it was reported by the Department of Agriculture. Before World War II and in early postwar years just prior to the Communist regime, the Chinese Mainland produced around 135,000 to 160,000 metric tons of tung oil annually. According to Mainland Chinese claims, output was 159,500 tons in 1956, 140,000 tons in 1957 and 220,000 tons in 1958. Apparently the 1958 estimate was planned output rather than actual production and output probably was no larger than 140,000 tons claimed in 1957.

Miscellaneous

Cocoa Butter—Market was quiet and lower. Prices ranged from 67c. to 72c. per pound, spot, as to quantity.

Copra—This market was quiet and easy.

—*Continued on page 61*

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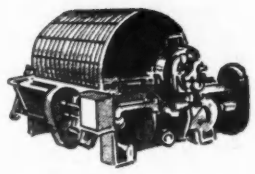
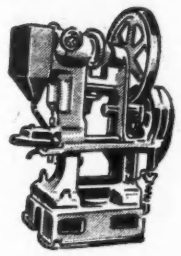
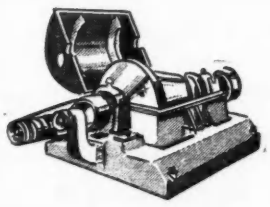


Bird Young Rotary Vacuum Filter 4' x 4' with stainless Screens; Oliver Pre-Coat Filters 3' x 2' Monel Drums with accessories; Conkey-Goslin-Birmingham 44" x 48" Rotary Vacuum Dewaterer, complete.

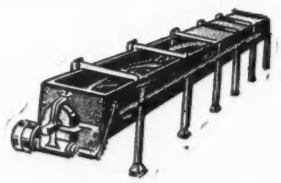
Stokes Single Punch Tablet Presses, Model Numbers "E", "T" and "R". Colton Single Punch Tablet Presses, Models "4½", "26", "216", "5½", "340". Stokes Rotary Presses, Models RD4, "BB", "DD2", "DDS2", "RD3", "RD1". Colton Rotary Presses, No. 10-35.

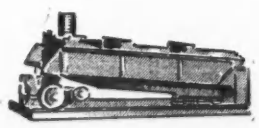




Bird Continuous Conical Centrifuge 18" x 28" solid conical bowl; Bird Stainless Continuous Conical Bowl Centrifuge; 24" x 38"; 20 HP Bird Continuous Centrifuge; 36" x 50" with 30 HP motor; Vapor Tight.

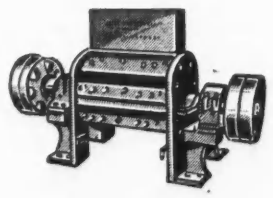
Four Crystallizers with Cooling Jackets for brine; 24" wide, 21" deep and 12' long; Bar type continuous agitator.

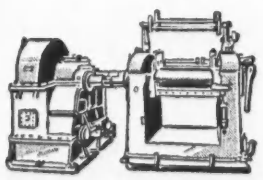




Orville Simpson Rotex Sifters; 40" x 54" to 40" x 120", others: Robinson 4 Separation Sifter, 30" x 102" with 3 HP motor. Patterson Gyrocentric Sifter, Stainless, 20" x 48"; 3 HP. Tyler Hummer Vibratory Screen, 4' x 5' with V16 Power Unit.

Ball & Jewell Stainless 6 Knife Rotary Cutters; 16" wide. Abbe Size 00 Rotary Cutter; 2 HP. Whitin Stainless Rotary Cutters, Cylinder 15" x 16"; 12" knives. Utility Rubber Stock Cutter, 5 HP.





F-B 14"x30" Rubber or Plastic Mills.
Stokes & Colton Pre-Form Presses.
Utility Rubber Stock Cutter.
Leominster Rapid Plastic Granulator.
Ball & Jewell & Abbe Rotary Cutters.

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1—PFAUDLER 750 gal., glass lined jacketed & agitated Reactor, 15 HP motor.
1—PFAUDLER 200 gal., G.L. jktd., agitated.
20—COLUMNS 3' to 12'6" dia. bubble cap plates, stainless lined and steel.
50—PRESSURE VESSELS horizontal & vertical up to 40,000 gal. @ 50 to 350 PSI.
1—FLETCHER 30" stainless Centrifugal, Suspended, perforated basket, vaportite.
5—ROTARY KILNS, 11'x155'; 9'x100'; 8'x115'; 8'x50'; 6'6"x60'.
5—RUGGLES COLES Dryers, 8'8"x70', 7'x50'.
3—ROTARY DRYERS 5'x45', 38"x27', 2'x28'.
3—ROTO LOUVRE DRYERS Link Belt steel 502-16, 705-24; stainless 604-24.
2—STEAM TUBE DRYERS: 6'x50' & 6'x25'.
1—RAYMOND 4 Roll High Side Mill.
3—SWEETLAND #10, #12 Pressure Filters.

SHARPLES C27 VAPORTITE SUPER-D-HYDRATOR, 316 STAINLESS STEEL
6 Automatic Cycle Timers; Solenoid, Rinse and 3 Way Diversion Valves; 40 HP X.P. Motor—Slight Use—Like New.

2—FLETCHER 40" Steel Centrifugals, Susp.
2—OLIVER 5'3"x3' Precoat Filters 316 S.S.
3—STOKES DDS-2, D3 Tablet Presses.
100—CUPRO-NICKEL & ADMIRALTY Heat Exchangers; 100 to 5200 sq. ft.
50—STEEL Heat Exchangers: 189, 880; 1042; 2060; 3900; 4420; 7500 sq. ft.
3—SWENSON-WALKER 24"x20' Crystallizers.
1—SWENSON 480 sq. ft. rubber lined Evap.
10—TYLER-HUMMER Screens, 4'x6', 4'x8'.
8—JEFFREY Hammer Mills, 15"x8"; 20"x12"; 24"x18"; motor driven.
200—CENTRIFUGAL PUMPS up to 12,000 GPM @ 25' to 900' head, X.P. motor driven.
1—BIRD 32"x52" S.S. Centrifuge.
1500—Recorders, Controllers & Indicators.

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1—Bird 32" x 50" Cont. Cent. 316 S.S.
4—Sharples C20 Super-D-Hydrators, 316 S.S.
2—Sharples PN14 Super-D-Canters, 316 S.S.
1—AT&M 26" susp. Cent., perf. bskt. 316 S.S.
1—Oliver 8' x 8' Precoat rubber covered Rotary Vacuum Filters.
12—Sperry 36" plate & frame Filters, rubber covered, cast iron, and wood.
5—8' dia. x 24' rubber lined Crystallizers.

PULVERIZERS AND MILLS

2—Abbe 5' x 16' brick lined Mills.
2—30" dia. Stainless Steel Micronizers complete with Hoppers, Conveyors, etc.

STEEL TANKS

4—2000 to 5200 gal. with Turbo Agitators.
15—Storage Tanks: 3800; 6000; 9000; 10,000; 15,000; 47,000 gals.

KILNS AND DRYERS

1—Traylor 11' x 155' Rotary Kiln, 7/8" shell.
1—Renn 6' x 60' Rotary Kiln, 5/8" shell.
1—Proctor & Schwartz 8' wide x 60' long Conveyor Dryer, Stainless Steel Belt.

RUBBER LINED TANKS

4—3400 gal. with Turbo Agitators.
5—8500 gal. Vertical Storage 8' 6" x 16' x 8' cone.
1—13000 gal. Horizontal Storage 8' x 35'.

MISCELLANEOUS

7—Dorr Thickeners: 16' dia. with Tanks.
1—Bemis 50# Bag Packer with Sewing Machine, Conveyor and Flattener.
65—LaBour, Durco, Worthite, Duriron and Stainless Steel Centrifugal Pumps 2" to 6" with motors.

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We are pleased to announce that we have just purchased a two acre site at 35-65 Jabez Street, Newark, N. J. (near Newark Airport). We expect to have our new office, shop and warehouse buildings ready for occupancy on or about October 30th. In order to save extra cost of handling, we are now ready to cut prices on every item we have in stock at our New York warehouses.

THIS IS YOUR OPPORTUNITY TO TAKE ADVANTAGE OF CONSIDERABLE SAVINGS ON YOUR PRESENT AND FUTURE REQUIREMENTS.

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CENTRIFUGALS AND CENTRIFUGES

3—Bird 18" x 28", continuous, Stainless & Steel Bowls.
1—Bird 36" x 50", continuous, Steel Bowl.
10—Sharples #6 & #16 Super Centrifuges, Stainless & Steel Bowls.
1—DeLaval #600 Separator.
1—Sharples Nozzlejector, 15 HP.
1—12" Stainless Basket.
1—Tolhurst 26" Steel Basket.
1—Fletcher 30" Steel Basket.
1—Tolhurst 32" Steel Basket.
1—AT&M 36" Rubber Basket.
1—Hepworth 40" Steel Basket.
2—Tolhurst 40" Steel Baskets.
1—Tolhurst 40" Bronze Basket.
1—Bird 40" Rubber Covered Basket.
1—Fletcher 40" Stainless Basket.
1—Bird 40" Stainless Basket.
1—AT&M 48" Stainless Basket only.
2—International Model FS-3, Bronze Baskets.

CRYSTALLIZERS

3—Swenson Walker 30' continuous, Steel.

ATMOSPHERIC ROTARY DRYERS

1—30" x 12' Aluminum Shell.
1—Vulcan 4' x 30'.
1—Link Belt 6'4" x 24".
2—Vulcan 7' x 80'.
3—Louisville 8' x 50', Stainless Shells.

VACUUM DRYERS

1—Stokes 30" x 8' Rotary.
1—Devine 10 shelf, 40" x 43".
3—Buffalo 20 shelf, 60" x 80".
1—Devine 3 shelf, 14" x 14".
1—Baker Perkins 5'6" x 6' Rotary.

ATMOSPHERIC DRUM DRYERS OR FLAKERS

2—Devine 48" x 108", Single Drum.
2—Buflovak 42" x 120", Double Drum.
1—Buflovak 48" x 28", Bronze, Single Drum.
1—Buflovak 24" x 36", Single Drum.

DRYING OVENS AND FURNACES

1—American Sterilizer, 3' x 2' x 3', electric.
1—Precision Sterilizer, 18" x 18" x 18", electric.
1—Hudson Heat Treating Furnace size 4, gas.

DIALYZERS

2—Brosite Machine Co., Steel and Stainless Leaves.

EVAPORATORS

1—Harris 3' dia. x 8½' high, Stainless.
1—Condenser Service 5' dia. x 6' high, Stainless, 120 sq. ft.
1—Buflovak Stainless, 250 sq. ft.

FILTER PRESSES

2—Shriver 12" x 12", Cast Iron.
6—Shriver & Sperry 18" x 18", Cast Iron.
4—Sperry 24" x 24", Cast Iron.
2—Sperry & Shriver, 30" x 30", Cast Iron.
1—Shriver 36" x 36", Cast Iron.
3—Skeletons, 18" x 18", 24" x 24", 32" x 32", 36" x 36".
1—Sperry 24" x 24", Aluminum.

SWEETLAND FILTERS

2—#7 Sweetland Filters.
2—#10 Sweetland Filters.
3—#12 Sweetland Filters.

ROTARY FILTERS

1—Oliver 5'3" x 8', 130 sq. ft.
1—Conkey 3' dia., 27 sq. ft.
1—Oliver Precoat 5'3" x 3', Rubber covered.

PRESSURE FILTERS

1—Sparkler 33-S-28, 151 sq. ft., Stainless.
3—Niagara 36H-110-3, 1110 sq. ft., Stainless.

FILLING MACHINES

1—Stokes & Smith G-1.
1—National Model H Type M.
2—Rodgers Model 104.
1—Standard Knapp Case Packer.
1—Rodgers 8A Paste Filler.

INERT GAS GENERATOR

1—Kemp Size 3 MITHE, 3000 cfm.

CONDENSERS—HEAT EXCHANGERS

9—Struthers Wells, 20 sq. ft., Stainless.
2—Western, 28 sq. ft., Stainless.
2—Devine, 40 sq. ft., Copper tubes.
3—Devine, 60 sq. ft., Copper tubes.
4—Killebrew & Struthers Wells, 65 sq. ft., Stainless.
1—Whitlock, 90 sq. ft., Steel.
1—Devine, 90 sq. ft., Steel.
1—Devine, 115 sq. ft., Copper tubes.
1—Struthers Wells, 115 sq. ft., Stainless.
1—Alco, 157 sq. ft., Stainless.
5—Karbate, 187 sq. ft.
1—Western, 250 sq. ft., Stainless.
5—Struthers Wells, 275 sq. ft., Steel.
1—Struthers Wells, 315 sq. ft., Stainless.
1—Vogt, 352 sq. ft., Stainless.
6—Alco, 360 sq. ft., Steel.
1—General American, 370 sq. ft., Stainless.
1—S. & K., 400 sq. ft., Stainless.
1—Western, 430 sq. ft., Steel.
1—Struthers Wells, 500 sq. ft., Steel.
1—Struthers Wells, 536 sq. ft., Stainless.
1—Acme, 594 sq. ft., Copper tubes.
1—Nooter, 786 sq. ft., Stainless.
1—Downington, 850 sq. ft., Copper tubes.
1—Buflovak, 1080 sq. ft., Stainless.
1—Vulcan, 1220 sq. ft., Stainless.
1—Croll-Reynolds Barometric type 52-B, neoprene lined, 4'4" x 14'.

HYDRAULIC PRESSES

1—H.P.M. Steeping Press, 88 tons.
1—H.P.M. Steeping Press, 63 tons.
1—Lab. Hyd. Press 8" x 8".

KETTLES—REACTORS

1—Pfaudler 2 gal. glass lined, jacketed.
1—Patterson Kelly 50 gal., Steel, jacketed.
2—Dopp 80 gal., Steel, jacketed.
2—Dopp 150 gal., Steel, jacketed, agitated.
1—Pfaudler 250 gal., hastelloy C, jacketed.
1—Walter 500 gal., stainless, jacketed, agitated.
1—650 gal., steel, jacketed, 150 psi.
4—Buflovak 750 gal., Steel, jacketed, agitated.
2—Patterson 1000 gal., Steel, jacketed, agitated.
1—Blaw-Knox 1000 gal., Stainless, jacketed, agitated.
6—Struthers Wells 2000 gal., Stainless, jacketed, agitated.
1—Newman 3000# Steel, jacketed, agitated Crutcher.

LABELERS

5—World, National and Ermold Semi-Automatic, motor driven.

PEBBLE AND JAR MILLS

1—Abbe 3'9" x 3'6" silex lined Pebble Mill.
1—Abbe 4' x 5' silex lined Pebble Mill.
1—Abbe 5' x 6' silex lined Pebble Mill.
2—Abbe #1 Eureka Jar Mills, 9 gal.
1—Abbe double Jar Mill 2.6 gal. each.
1—Abbe 10 Jar Mill .8 pint each.

CRUSHERS—PULVERIZERS

1—Jeffrey 18" x 18" single roll Crusher, 10 HP.
1—Fitz Mill model D, Stainless, 7½ HP.
4—Jeffrey 8" x 15", 12" x 20", Hammer Mills.
1—Williams #1 Heavy Duty Hammer Mill, 30 HP.
1—Fairbanks Morse Hammer Mill, 15 HP.
1—Schutte type F Hammer Mill, 50 HP.
1—Williams Hammer Mill, 5 HP.
1—Raymond #00 Screen Mill, 10 HP.
5—Day, Kent and Mead Cage & Disc Mills.
2—Day 18" dia. Pressure type Ointment Mills.
2—Stokes 8" dia. Drug Mills, ½ HP.

MIXERS

1—55 gal. Drum Rolling, ¾ HP.
2—Day #9 "Cincinnatus" double arm, 250 gal.
2—Day #6 "Cincinnatus" double arm, 100 gal.
1—Baker Perkins #16 TRM double arm, vacuum, 150 gal., 60 HP.
1—Day #1 "Cincinnatus" double arm, 10 gal.
1—Baker Perkins #14 double arm, 50 gal.
16—Day, Horizontal, Powder; 200, 400, 600, 1000 and 1500#.
1—10 cu. ft. "V" type Stainless, 2 HP.
1—Sprout Waldron 7000#, Horizontal, Powder, jacketed.
1—Robinson 10,000# Horizontal, powder, jacketed.
2—Abbe Aluminum, Horizontal, 400 and 1000#.
3—McClellan 1 cu. ft., Stainless, Conical.
1—Stokes 200#, granulating.
1—Ross 50 gal., Mammoth Change Can.
1—Eppenbach 1 HP Stainless Homo Mixer.

PUMPS

12—Nash Hytor Vacuum; #7, #2, #TS7, and #1251.
2—Stokes Microvac 10 and 115 cfm.
10—Moyno, Rubber, Steel and Stainless, 1" to 4".
12—Proportioning; Roy, Lapp, Hills-McKenna, 75 gph to 705 gph, Stainless.
17—Durco Centrifugal; 1" to 4"; Duriron, Durimet, Chlorimet.
11—LaBour Centrifugal; 1" to 3", Stainless.
7—Taber Centrifugal; 1" to 3", Stainless.
3—Lawrence Vertical Centrifugal; 2½" x 1½", Stainless.
5—Worthite Centrifugal; 1" to 3", Stainless.
5—Oliver Centrifugal; 2" to 5", Olivite.
4—Quimby Centrifugal; 1" to 2", Rubber and Lead.
5—Wilfley Centrifugal; 4", Haveg.
23—Worthington, I. R., Deming, Dayton-Dowd; Centrifugal and Rotary; Iron and Bronze; 1" to 8".

VIBRATING SIFTERS

3—Robinson Triple Deck 30" x 104".
2—Rotex Double Deck 40" x 84".
3—Rotex Single Deck 60" x 84".
3—Robinson Single Deck 40" x 84", Stainless.
4—Sprout Waldron Single Deck 40" x 84", Stainless.
1—Link Belt Single Deck, 3' x 8'.
1—Allis Chalmers Multiple Deck, Low Head.

TABLET PRESSES

2—Stokes DDS2, DD2, Rotary, 7½ HP.
1—Kux model 15-25, Rotary, 5 HP.
1—Colton model 10-35, Rotary, 2 HP.
5—Stokes Single Punch, models R, T, F.

TANKS

1—Haveg 1500 gal., Horizontal, 15 psi.
1—1000 gal., Stainless, Vertical, Closed.
1—500 gal., Stainless, Vertical, Closed.
1—200 gal., Stainless, Horizontal.
1—Pfaudler 60 gal., Glass lined, vacuum.
1—2000 gal., Steel, Vertical, Mixing.
1—4000 gal., Steel, Horizontal, 150 psi.
1—6000 gal., Steel, Horizontal, 75 psi.

BRILL EQUIPMENT COMPANY

2401 THIRD AVENUE, NEW YORK 51, N. Y. Telephone: CYpress 2-5703

JUST PURCHASED

1—Link-Belt #604-18 roto-louvre dryer, 6'4" dia. x 18' long.

1—Link-Belt #310-20 Roto-Louvre dryer, 3'10" x 20'.

4—Baker Perkins 100 gal. jktd., sigma blade mixers, 25 HP.

2—2200 gal. T316 SS reactors, vacuum, jktd., agit.

2—1850 gal. T316 SS reactors, jkt. & agit.

1—1400 gal. T304 SS kettle, jacket, 5 HP XP agit.

1—750 gal. T304 SS clad reactor, jacket, 10 HP agit.

2—500 gal. T316 SS reactors, jacketed, agit.

1—350 gal. T304 SS reactor, vacuum, jkt. & agit.

1—Stokes #59A steel rotary vacuum dryer, 18" dia. x 42" long.

IN STOCK

FILTERS — CENTRIFUGALS

2—OLIVER 5'3" dia. x 3' f., rot. vac. filters, pressure precoat, T316SS, ASME.
1—OLIVER 5'3" dia. x 8' f. rotary vacuum filter, UNUSED, precoat.
1—Niagara #510-28 vert. pressure leaf filter, T316 SS, 500 sq. ft.
1—Niagara #36H-110 horiz. leaf filter, T304 SS, 100 sq. ft.
1—Sparkler #33-S-28 filter, T304 SS, 150 sq. ft.
21—Sharples #16 super centrifugals, Inconel Bowls, covers, 3 HP. TEFC motors.
8—Sharples #16 Super Centrifugals, T304 SS. (sep. & clarif.).
2—Sharples #18-V Super, vapor-tite, tinned-steel, 3 HP.
2—Bird horiz. contin. Centrifugals: 18" x 28", T304 SS or steel.
3—Bird type CH, 24" x 24", Monel slotted screen, continuous.

DOUBLE ARM MIXERS

71—Baker-Perkins size #17, 200 gal. working capacity, jacketed, sigma or duplex blades, mechanical, hydraulic, or counterweight tilt mechanisms.
4—Baker Perkins #15-VI-BBC, 100 gal., sigma, jktd., 25 HP.
1—J. H. Day 100 gal. sigma-blade, T316 SS, 10 HP.
3—Baker-Perkins sigma-blade, steel: 100, 50 gal.

ROTARY DRYERS — KILNS

1—7'6" dia. x 60' long Kiln, ½" welded shell.
1—7'6" dia. x 100' long kiln, ½" shell, firing hood, 30 HP M-R.
1—8' dia. x 125' long Kiln, ⅜" shell (2) tires.
1—11' dia. x 155' long Traylor kiln, ¾" welded shell.
4—8'8" x 70' dryers, Hardinge class #XA-18, ½" dbl. shell.
1—7' x 50' dryer, Allis-Chalmers, ½" shell, indirect-direct, 50 HP.
1—6' x 50' Louisville steam-tube dryer, 15 HP M-R.
1—6' x 25' Louisville rotary steam-tube dryer.
6—Dryers: 5'6" x 50', 4'9" x 30', 4'6" x 40', 4'6" x 32', 4' x 24', steel.
2—Stainless steel dryers: 4' x 12'6", 3' x 10'6".
1—3' x 15' rotary dryer, Everdur metal construction.
1—Link-Belt Mono-tube dryer, 2' x 10', model #24-10.
2—4' dia. Spray Dryers, Western Precip., T304 SS, pilot size, elec. heating.

MILLS

1—Kennedy-Van Saun 4'x8' rod mill, 50 HP.
4—Allis-Chalmers 5'x22' ball-tube mills, 150 HP.
1—Raymond #5057 Hi-side roller mill, 5-rolls.
1—Raymond 66" 6-roll, mill, 200 HP.
1—Babcock & Wilcox pulverizer, type E-32, 75 HP.
10—Batch Pebble mills: 8'x10', 6'x8', 5'x6', 6'x5', etc.
1—Penna. non-clog hammermill, 400 HP, 1952—UNUSED.
4—Jaw crushers: 36"x15", 20"x6", 18"x9", 8"x6".
3—Ink or paint mill (3-roll): 9"x24", 6"x14".

NEW ADDITIONS AT ORANGE, TEXAS

1—2200 gal. T316 SS reactor, vacuum, jkt. & agit.
2—1850 gal. T316 SS reactors, jkt. & agit.
2—Read T304 SS weigh hoppers, 11'10" x 10'5" x 10'2", plus hopper bottom.
5—1850 gal. T316 SS vert. tanks w/agit. (some with jackets).
1—1100 gal. T316 SS vert. tanks.
4—Buffalo T316 SS blowers, 5600 cfm.
1—Mikro #4TH, 50 HP, stirrup hammers.

TYPE 316 STAINLESS STEEL KETTLES

3—3,500 gal. kettles, Struthers-Wells, 7' dia. x 12' high, T316 SS, 11/32" shell, dished heads, 11 turns, SS coil, 10# jacket, two-speed agitator, 40/20 HP - 1750/500.
1—2850 gal., 6' dia. x 12' high, T316 SS, horiz, still kettle.

COLUMNS — STAINLESS STEEL

1—108" dia. Vulcan scrubber, T316 SS, 10 traps on 12" centers, 252 caps.
1—96" dia. Vulcan scrubber, 10 T316 SS trays 12" centers, 276 caps.
2—96" dia. Vulcan columns, 30 trays, T316 SS, 272 caps per tray.
2—60" dia. x 13' high, Vulcan scrubbers, 10 trays, 100 caps tray, 12" centers.
1—48" dia. column, 30 trays, 66' high, T304 ELC SS.
3—30" dia. packed columns, 25' high, T316 SS.
4—24" dia. Vulcan bubble cap columns, 12 trays, T316 SS, 18" spacing, vacuum.
2—20" dia. stainless steel columns, 30' & 25' high, T316 SS.

COLUMNS — COPPER

1—72" dia. Vulcan bubble cap copper column, 46'10" high, 40 trays, Vacuum.
2—48" dia. bubble cap copper columns, 31' & 45' high, Vacuum.
2—42" dia. Vulcan stills, 66" high (evaporator bodys).
1—24" dia. column, 25'8½" long, 20—trays, vacuum.

FILTERS — CRYSTALLIZERS — CENTRIFUGALS

2—Sharples C-20 Super-D-Hydrators, T316 SS, 20 HP.
3—18,000 gal. aluminum cone bottom tanks, 12' dia. x 31' OAH.
4—1200 gal. crystallizers, T316 SS, 5' dia. x 7' high, cone bottom, dished top.
7—560 gal. crystallizers, T316 SS, 3'6" dia. x 7' high, cone bottom, dished top.
3—Worthington 160 ton steam-jet refrigeration units.

TYPE 316 STAINLESS STEEL TANKS

1—17,650 gal., 9' dia. x 36' long, T316 SS, ¼" shell, ⅜" dished heads, w/coil.
2—6,500 gal., 11' dia. x 7' high, ½" dished heads, VACUUM.
1—2,850 gal. 6' dia. x 12' long, horiz., dished heads.
12—2,300 gal. 7' dia. x 8' high, T316 SS, ¼" shell, coils (some with agitators).
2—2,200 gal., 6'6" O.D. x 8' high ¼" shell, vertical.
2—1,100 gal. 5'6" dia. x 6' high, T316 SS, with paddle agitators, 2 HP.
4—1,200 gal., 5' dia. x 7' high, dished top, 42" deep conical bottom.
7—560 gal., 3'6" dia. x 7' high, ¼", dished top, 4' deep conical bottom.
55—Tanks and Pots from 10 gal. to 350 gal. sizes, vertical and horizontal.

CONDENSERS — HEAT EXCHANGERS — CALANDRIAS — COOLERS

1—1,450 sq. ft. condenser, stainless steel tubes, tube sheets, heads, and baffles, steel.
1—1,200 sq. ft. condenser, stainless steel tube, steel shell.
14—Condensers, 750 & 800 sq. ft. stainless steel, vertical, T316 SS tubes and heads.
9—Condensers, 427, 400, 410, 550 sq. ft., T316 SS.
6—Calandrias, 140, 145, 150, 157, 262, 277 sq. ft., T316 SS.
11—Exchangers, 64, 70, 75, 80, 100 sq. ft., T316 SS.
12—Exchangers, 20, 30, 47, 48, 52, 54 sq. ft., T316 SS.
15—Exchangers, Cupro-nickel tubes, 50 to 1070 sq. ft.

MISCELLANEOUS EQUIPMENT

50—T316 SS Pumps, 1" to 6", 1 HP to 20 HP.
2000—Valves, T316 SS up to 10". Flanged valves, globe or gate.
10000'—T316 SS tubing; 1", 2", 3" etc., up to 12".
1—Otis Elec. Elevator, automatic, 5000#, 75 FPM.
1—P & H 5 ton travelling crane.
2—St. St. bucket elevators, 62' and 45' high.
4—Stainless steel screw conveyors and chutes.
1—2,000 gal. aluminum tank, 6' dia. x 10' high, coils.
1—1,000 gal. copper tank, 7'6" dia. x 3' high, ⅛".
18—Separators, T316 SS, 22" x 8' overall depth, cone type.
1—Croll-Reynolds #21 jet vacuum air pump, capacity 50# per hour.
1—Pneumatic Conveyor System, approx. 1150 ft. 10" dia. aluminum pipe.

PERRY EQUIPMENT CORPORATION

1407 N. SIXTH STREET, PHILADELPHIA 22, PA.
Phone: POplar 3-3505

EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

1—Tolhurst 40" suspended type centrifuge, perforate basket type 316 SS, complete with motor and plow.

2—Struthers Wells 500 gal. nickel jacketed reactors, complete with anchor type agitator, drive and motor.

1—Struthers Wells type 316 SS jacketed reactor, 3500 gal., complete with agitator, drive and coils.

8—Alco type 316 SS jacketed reactors, 3000 gal., complete with agitators and drives.

1—A. O. Smith SS 1000 gal. jacketed reactor, complete agitator and drive.

1—Edgemoor Iron Works type 316 SS jacketed reactor, 750 gal.

2—Steel and Alloy Tank Co. SS jacketed autoclaves, 250# jacket, 250# internal pressures, 225 gal. and 125 gal.

2—Steel and Alloy Tank Co. SS pressure tanks, 250# pressure, 300 gal. and 100 gal.

1—Sweetland #3 SS filter.
1—Niagara SS filter, Model 36H-110-3.

1—Niagara SS filter, Model 510-28.

1—Oliver rotary vacuum precoat filter, type 316 SS, 3' x 4'.

12—Sweetland #12 filters with 72 SS leaves.

1—Feinc SS rotary string filter, 3' x 3' (NEW).

1—Tolhurst 40" suspended type centrifuge, perforate basket type 347 SS, complete with motor and plow.

4—Tolhurst center slung 30" rubber covered centrifuges, complete with perforate baskets and motors.

2—Pfaudler 500 gal. glass-lined jacketed reactors, complete with anchor type agitators and drives.

1—Baker Perkins 5 gal. double arm sigma blade mixer, Size 8CE, complete with motor and drive.

1—Baker Perkins Size 16 TRM, 150 gal. double arm sigma blade jacketed vacuum mixer complete with motor and drive.

2—Sturtevant #7 Dustless type 304 SS rotary batch blenders (NEW).

3—Louisville SS rotary dryers, 8' x 50'.

1—Louisville rotary dryer, 38" x 40', Type L.

2—Rotary dryers, 6' x 36'.

1—Louisville rotary steam tube dryer, 8' x 45'.

5—Link Belt steel roto louver dryers, Models 207-10, 310-16, 310-20, 604-20, 1003-30.

1—Ames 300 HP steam generator, 150#.

1—Cleaver Brooks 500 HP steam generator, 200#.

1—Mikro #1SH pulverizer.

1—Mikro SS Bantam pulverizer.

8—SS storage tanks, 500 to 3300 gallon.

1—Simpson #O, Type M, intensive mixer.

1—18" Simpson Laboratory muller.

1—Patterson-Kelley 6000 gal. steel jacketed reactor, complete with agitator and drive.

1—Pfaudler type 316 SS 150 gal. jacketed reactor, complete with impeller type agitator, drive and baffle, 85# jacket, 75# internal.

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Abbe 2200# Spiral Mixer.
Day 20 gal. Monel Jack. Sigma Blade Mixer.
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Fletcher 30" type 316 S S. Sus. Style Extractor.
Horiz. Jack. Sterilizer 36" x 48" x 96".
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OLIVER VACUUM FILTERS—S.S. 316, 3' x 6' Complete. (1954)
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FILTER PRESS—Shriver 36" x 36"—34-1¼" Rubber Covered Frames.
HARDINGE Conical Ball Mill, 4½' x 16".
SIFTERS—Rotex 2 deck, 40" x 60"; 5 deck, 40" x 120"; 20" x 48"
EVAPORATOR—Single effect, S.S. VRC, 250 sq. ft., Blaw Knox 1953. Complete.
BLENDERS—400#, 1250#, 3000#.
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HEAT EXCHANGER—S.S. 500 sq. ft., single pass.

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1—Welf 200 cu. ft. Ribbon Mixer, md.
1—Lee 150 gal. S. S. Kettle, 40# jkt.
1—Simpson Size 0 Intensive Mixer.
1—Tolhurst 30" S. S. Extractor, m.d.
1—Shriver 30" cast iron, c.d., Filter.
1—Robinson 30x60" S. S. Gyro Sifter.
1—Amer. 36x42x84" Jack. Sterilizer.
1—#2 Sweetland Filter, leaves 2" centers.
1—Kent 12x30" 3 roll w. c. Roller Mill.
Hammer Mills, Tablet Mchs. Moyno Pumps.

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Patterson 6'x5' Jkt'd Steel Ball Mill, 25 HP.
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Sturt. #3 Dry Batch Mixer, 7' dia., ser. 611.
Buflovak 316 SS 3'x20' Rot. Vac. Dryer, 10 HP.
Nash Hytor Vac. Pump, #6, 40 HP motor.
Gruendler "BB" Whirlbeater Hammer Mill.
BP Jktd. Mixer, 100 gal. work'g, cored arms.
Gen. American 42"x120" Twin Drum Dryer.
2—Mikro's—Bantam & 1SL with 5 HP mtrs.
RIBBON BLENDERS, all sizes, New & Used.

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8—300 Gallon Baker-Perkins, Size 18, Type VIII/H, Class BS-ORD., C.I. Jacketed Shell & Ends, Overlapping Reverse Duplex Blades (with removable Serrated Shoes) 30 H.P. Gen. Elec. Motor Drives 3/60/440/900 r.p.m. Tilt by Vickers Hydraulic Pump & 3 H.P. direct connected Motors. Drive Shaft—262 R.P.M., Blades (front & rear)—40 R.P.M.; Location: Clinton, Iowa.

Note: These Shredders are of late design, in VERY GOOD CONDITION and priced VERY LOW, before removal.

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BUSINESS OPPORTUNITIES

Chemical Specialties business wanted. Seek to purchase all or controlling interest of mfrg or jobbing business now doing $100,000 or more annual vol. Industrial, institutional, janitorial trade preferred. Loc Metro NY, NJ area. Submit full details first letter. All replies strictly confidential. OPD 815.

Dry Color Plant Wanted. Established company having National Representation and sales to the Paint, Ink, Plastic, Rubber and other Protective Coatings Industries, wishes to Buy or Acquire an interest in a Pigment Manufacuring Plant or one manufacturing allied Products. OPD 814.

Medium Size industrial chemical specialty company with plants having railroad sidings in locations from coast to coast, north and south, interested in manufacturing additional products, preferably bulk products. Interested in full time or part time services of chemists, salesmen or men familiar with the manufacturing and, or selling of the products, OPD 819.

EQUIPMENT OFFERED

For Sale: 8,000 gal. stainless vertical Storage Tank; (4) 7,750 gal., (6) 4,650 gal. Phenolic lined Tanks; 72" dia. stainless single effect Evaporator; 1,500 gal. stainless Vacuum Tank with coils; 42" x 120", 32" x 72", 42" x 90" Double Drum Dryers; 750-1,800 gal. stainless Tanks; 40" Tolhurst suspended perforated Centrifuge. Best Equipment Company, 1737 W. Howard St. Chicago 26, Illinois.

Two 42" Type-E-Hercules Centrifugal Extractors. Hamilton Chemical Co. Inc., Ibsen Ave. & Oldham St., Baltimore 24, MD. Phone EA 7-0555.

Vacuum Pumps—50, 115 CFM Beach Russ, type RP, class D, w/5 HP motors/vee belt—½ price. Call (N.J.) Liberty 9-0245 or write OPD 806.

For Sale: Raymond 50" HI-SIDE Roller Mill, Double Whizzer Separator with Reeves Drive and its motor. Mill parts not new are original factory tolerance measures. Delivery 60 days. Foundation and Installation Prints available now. C. M. Slaughter, 1619 West Central Ave., Orlando, Fla. Ph. GArden 2017L.

EQUIPMENT OFFERED

For Sale: Approximately 30 used coiled tanks size 2,000 to 20,000 gallons plus two boilers, pumps, pipes, etc. "as is, where is," to be removed from plant in Jersey. OPD 824.

EQUIPMENT WANTED

Plastic Laboratory processing and testing equipment wanted including benches, scales and balances, mixers, presses, mills, physical testing machines, evaluation equipment, glassware, small high pressure steam boiler etc. All or part. OPD 828.

MATERIALS OFFERED

Manganese Dioxide 58% M.N. up to minus 300 mesh. Price on request, E. H. Beer & Co., Inc. Baltimore 24, Md. Tel.—EAstern 7-0555.

For Sale: 90% Methanol, 20,000 gallons, 20 cents per gallon. Suitable for anti-freeze. OPD 825.

PLANTS WANTED

Resin Plant or Varnish Plant wanted suitable for thermosetting or thermoplastic resins—Will purchase or lease—Metropolitan New York, New Jersey or Connecticut preferred—Principals only. OPD 826.

POSITIONS WANTED

Chemist, 22 yrs. industrial experience research and supervision, desires position as international technical representative. Working knowledge of Spanish, presentable, Ph.D. organic chemist, no minor children, salary important but secondary to opportunity. OPD 827.

Nickel Salts Output Started

Vitro Rare Metals Company, Canonsburg, Pa., a division of Vitro Corporation of America, has begun production of nickel sulfate, nickel chloride and nickel carbonate for electroplating operations. The Canonsburg plant also produces nickel acetate and formate. The products are distributed by Berkshire Chemicals, Inc., New York, a Vitro subsidiary.

MACHINECRAFT

Stokes 3 DDS2, 2 DS3.
Baker Perkins, 150 and 100 gal. S.S. 2 arm.
40 HP & 50 HP jacketed, vacuum, hydr. tilt.
Blaw-Knox 2 gal. S.S. Autoclave 5,000 lb.
Vulcanizer 60" x 9' 125 lbs.
Sweetland #2 all stainless.
Stainless steel Ball Mill.
Aluminum Condenser 350 square feet.
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1-24" Filter Press open delivery.
2 Proctor & Schwartz finned Drum Driers.
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Pebble Mills: Patterson D 3 x 4' porc.
Disintegraters: Rietz RD18-P, steel, 75 hp.
Reactor: 50 gal. Pfaudler gl. lined, ag.
Percolators: Pfaudler, stainless, 54 x 42"
Mills: Fitzpatrick model D, st., jktd.
Rectifying Column: copper 16" dia. x 30'
Dryer: Porter 2 x 4' vac. drum, st. st.
Centrifugal: Tolhurst 26" rubber. 2-speed.
Mix-Mullers: Simpson Lab., Porto, #00.
Dewaterers: Davenport model 3A, 3 hp.
Centrifugal: Tolhurst 20" type 316 st. st.

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Gulf Oil Reveals Manifesto of Political Aims

—Continued from page 7

gram "will find ways and means of convincing its employees, its shareholders, its dealers—indeed, everyone who depends upon it in whatever degree—that their best interests are served by the success of the company."

In the political arena itself, the Gulf program is leveling a two-pronged attack: one aimed at the already mentioned local and regional level; the other pointed straight at the heart of the national body politic.

In Washington, Gulf says, it is going to set up an office out of which will work a legislative analyst who will also be registered as a lobbyist, and a political writer, who will also serve as a Gulf public relations representative in the capital.

Also, Gulf is going to publish a bi-weekly newsletter that will summarize all Washington legislative activity pertaining to the oil industry.

Notes Gulf in its program: "This newsletter will be written by an appropriate agency, some respected, objective Washington news source. However, one page of this newsletter will be prepared by Gulf's political writer in which he will analyze the news in terms of Gulf's corporate interest. This newsletter will be distributed to the level of district manager."

Gulf Stresses Practicality

On the other end of the political scale, at the grass roots level, Gulf points out that "here men can grapple with real, rather than theoretical problems and the results can begin to be seen quickly."

"However, the greatest advantage in beginning at the local level is the opportunity to prove over and over that the company is embarked on a positive program for if the company becomes known as an organization that stands for and works for community betterment it will be much more persuasive when if it is forced to be against something.

In conclusion the Gulf manifesto says: "All this must be on a nonpartisan basis. Gulf's employees will be encouraged to become effective voices in any political party in which they choose to be active. Since civic and political activities are a responsibility of citizenship, incentives need not be offered, but recognition of particularly outstanding civic or political contributions by employees in company publications will be made.

"The company will consider granting leaves of absence to employees who may be elected to public office. Some discretion will be exercised and it is difficult, if not impossible, to draw up a set of rules and regulations at this time. In the case of an employee who undertakes a part-time civic or political responsibility which is deemed worth-while in terms of the objectives of this program, his immediate supervisor will endeavor to make arrangements to enable him to perform these functions.

"Since wives are tremendously important in any such program, the company will also encourage the wives of employees to become active in carrying out the objectives of the program."

Trimellitic Anhydride

—Continued from page 3

cannot be duplicated with currently available materials.

"The multi-million pound unit which will be built at a company-owned site south of Joliet, Ill., is expected to be on stream by mid-1960. This new unit will enable us to supply our customers' requirements of trimellitic anhydride which is currently being allocated."

Dr. Harrington pointed out that the protective coatings industry has been particularly enthusiastic about the water-soluble baking finishes derived from trimellitic anhydride. These finishes have outstanding film properties and produce excellent quality finishes with high gloss without the use of organic solvents. Such systems have been a goal of this industry for many years.

"Another promising application for trimellitic anhydride is its use as a curing agent for epoxy resins," Dr. Harrington continued. "It is also a chemical intermediate and a raw material for the production of long-oil alkyd resins, unsaturated polyesters, and thermosetting adhesives.

"Tribellitic anhydride is the first in a series of new aromatic acids which can be made by the flexible Amoco oxidation process. Pilot plant quantities of other new aromatic acids will be introduced during the next year," he concluded.

Bids Wanted

Alcohol, 54 gals., (Ethanol Ethyl Alcohol), **Alcohol**, dehydrated, 1 pt. (Absolute, Alcohol), 13,584 bots.; **Acetone** ACS, 1 Pt. (Dimethyl Ketone), 9,648 bots., Bid IFB M5-15-60, Aug. 27, Marketing Div. For Drugs & Chemicals, VA Supply Depot, Somerville, N. J.

Catalyst, carbon monodixe & hydrocarbon oxydizing, Stk. No. PM6850-605-7854, 1,700 lbs., Bid IFB 104-217-60, Sept. 14, Commanding Officer, Ships Parts Control Center, Mechanicsburg, Pa.

Detergent, general purpose, 17,271 gals., Spec. MIL-D-16791C, Type I, Bid IFB 155-261-60B, Aug. 25, General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

Drugs, Cyanocobalamin injection, 1000 mg. per M1, 5 M1, (Vitamin B_{12}), 6,100 vials; Oleovitamin A capsules, 1000s, 96 bots.; Phenobarbital tablets, 0.03 Gm., (½ Gr) 1000s, 3,120 bots.; Decavitamin tablets, 1000s, 1,536 bots.; Cyanocobalamin injection, 100 mg. per M1, 10 M1 (Vitamin B_{12}), 2,064 vials, Bid IFB M5-14-60, Aug. 27, VA Supply Depot, Somerville, N. J.

Ferrous Sulfate, copperas, green vitriol coagulant in sewage water, indefinite quantity, term contract for period from date of acceptance thru 8/31/60, Bid IFB CH-53204, Aug. 27, General Services Admin., Region 5, 575 US Courthouse, 219 S. Clark St., Chicago 4, Ill.

Paint, indefinite quantities, term contract, primer coating, Bid IFB DA-30035, Sept. 25, General Services Admin., Business Service Center, Region 7, 1114 Commerce St., Dallas, Tex.; brush paint, Spec. Fed. H-B-00420A, (COM-NBS) with GSSO, Spec. Exception 8020-307, Class 2, high grade, Class A, 38,088 ea., Bid IFB 155-217-60B, Aug. 24, General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

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Box 823, Oil, Paint and Drug Reporter, 30 Church Street, New York 17, N.Y.

Current Market Quotations

—*Continued from page 31*

Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis	gal.	1.25	—
dms., l.c.l., same basis	gal.	1.30	—
tanks, same basis	gal.	1.05	—
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis.	gal.	1.35	—
dms., l.c.l., same basis	gal.	1.40	—
tanks, same basis	gal	1.15	—
2,4-Xylidine, tech., dms. frt. alld.	lb.	1.15	—
2,5-Xylidine, tech., dms.. frt. alld.	lb.	1.20	—
Xylidines, mixed, o-m-p, dms.. c.l., or t.l., works	lb.	.39	—
dms., l.c.l., same basis	lb.	.40	—
tanks, same basis	lb.	.38	—

Xylol

Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns.	lb.	2.15	3.05
Yeast, brewers, debittered, USP, Saccharomyces dlvd	lb.	.27	—
Yeast, brewers, dry, USP, 50 Int'l B units per gram, 100-lb. dms.	lb.	.47	—
USP, 90 Int'l B units per gram, 100-lb dms	lb.	.52	—
USP, 200 Int'l B units per gram, 100-lb. dms	lb.	.56	—
USP, 300 Int'l B units per gram, 100-lb. dms	lb.	.60	—
Yohimbine hydrochloride, bots.. tins.	oz.	3.75	4.25

Yellow Pigments

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls.	lb.	.50	.55
Ylang-ylang oil, Bourbon, bots	lb.	7.00	22.00
extra, bots.	lb.	28.00	33.00
Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb lots or more. dlvd.	lb.	.343	—
bgs., smaller lots, dlvd.	lb.	.373	—

Z

Zinc acetate, NF, VIII, dms.	lb.	.53	—
Tech., dms.. l.c.l. works	lb.	.29¾	—
Zinc borate, bgs., 1,000 lbs or more, works	lb.	.23	—
bgs. less than 1,000 lbs. same basis	lb.	.25	—
Zinc chloride, NF, gran. dms	lb.	.42	—
NF, precip., powd., dms	lb.	.26	—
Tech. soln., 50%, dms.. c.l., works.	100 lbs	5.80	—
dms., l.c.l., works	100 lbs	6.40	—
tanks, works	100 lbs	5.15	—
tech., fused, dms., c.l., works	100 lbs.	10.70	—
dms. l.c.l. works	100 lbs.	11.20	—
gran., fib. dms., c.l., works	100 lbs.	11.45	—
fib dms. l.c.l.. works	100 lbs.	11.95	—
Zinc chromate bbls., dlvd.	lb.	.29	—
Basic, bbls.. dlvd.	lb.	.34	—
Zinc cyanide, dms., 1,000-lb. lots or more, works	lb.	.55	—
dms., smaller lots, works	lb.	.57	—
Zinc dust, coml., bbls.. c.l., works.	lb.	.1460	—
Pigment, bbls., c.l., works	lb.	.15	—
bbls., l.c.l., works	lb.	.16	—
Zinc fluoride, bbls.. works	lb.	.49	.50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½	—
dms.. l.c.l., frt. alld.	lb.	.23½	—
Zinc metal, prime western slabs, E St Louis	lb.	.11	—
Prime western, slabs. New York.	lb.	.11½	—
Zinc naphthenate, liq., 8% Zn., dms., frt. alld	lb.	.27	—
10% Zn., dms., frt. alld	lb.	.33	—
Zinc nitrate, tech., cryst., bbls., works	lb.	.20	—
Zinc oxide pigment, American process., lead-free, bgs., c.l., frt. alld	lb.	.14½	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.15	—
bgs., l.c.l., smaller lots, same basis	lb.	.15½	—
leaded, 35%, bgs., c.l., mills, frt. alld	lb.	.15½	—
bgs., l.c.l. 10 tons or more, same basis	lb.	.15¾	—
leaded, 50%, bgs.. c.l., same basis.	lb.	.15¾	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.15¾	—
bgs., l.c.l. smaller lots, same basis	lb.	.16¾	—
Zinc oxide pigment, French process, green seal, bgs., c.l., mills, frt. alld	lb.	.16¼	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¾	—
bgs., l.c.l., smaller lots, same basis	lb.	.17¼	—
red seal, bgs., c.l., same basis.	lb.	.15¾	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼	—
bgs., l.c.l., smaller lots, same basis	lb.	.16¾	—
white seal, bgs., c.l., same basis	lb.	.16¾	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.17¼	—
Zinc oxide pigment, French process, white seal, bgs., l.c.l., smaller lots, same basis.	lb.	.17¾	—
Zinc oxide, USP, dms., c.l., frt. alld.	lb.	.18¼	—
dms., l.c.l., 10 tons or more, same basis	lb.	.18¾	—
dms., l.c.l., smaller lots, same basis	lb.	.19¼	—
Zinc phenolsulfonate, NF, gran., dms	lb.	.45	.46
NF, powd., dms	lb.	.48	.49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. alld	lb.	.36¼	—
Zinc silicofluoride, dms., works	lb.	.12½	.14
Zinc stearate, tech., USP. ctns., c.l.,	lb.	41	—
ctns., l.c.l.	lb.	.43	.46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E	100 lbs.	8.75	—
bgs., l.c.l., dlvd. E	100 lbs.	9.75	—
USP, gran., dms.	lb.	.26	—
Zinc sulfate in bbls. 40c. higher.			
Zinc sulfide, pure, bgs., c.l., dlvd	lb.	.2530	—
Zinc undecylenate, dms.	lb.	2.00	—
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	—
bbls, c.l., works	100 lbs.	10.85	—
bbls., l.c.l., works	100 lbs.	11.35	—
Zinc-formaldenyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb.	.26	—
normal, 250-lb. dms., frt. alld	lb.	.52	—
Zircon (G), gran., bgs., c.l., works.	lb.	.03½	—
bgs., 5 tons to c.l., works	lb.	.03¾	—
bgs., 1 ton to 9,999-lb. lots, works.	lb.	.04	—
bgs., smaller lots, works	lb.	.06½	—
Zircon (G), milled, bgs., c.l., works.	lb.	.04½	—
bgs., 5 tons to c.l., works	lb.	.04¾	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅞	—
bgs., 500-1,999-lb. lots, works	lb.	.07½	—
Zircon (G) in barrels 1c. higher.			
Zirconium acetate, soln. 13% ZrO_2 dms., c.l., 30,000 lbs. min., works	lb.	.23	—
Zirconium hydride, powd., electronic grade dms., works	lb.	14.00	15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works	lb.	1.50	—
Zirconium oxide, electric-fused, lump, bgs., 500 to 1,999-lb. lots, works	lb.	.46½	—
bgs., smaller lots, works	lb.	.51	—
milled, bgs., c.l., works	lb.	.62	—
bgs., 5-ton lots, works	lb.	.62½	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½	—
bgs., 500 to 1,999-lb. lots., works	lb.	.64	—
bgs., smaller lots, works	lb.	.66	—
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55	.60
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	.50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62	.85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½	—

Borax Men Saw

—*Continued from page 3*

cal Corporation sales and earnings this year, according to the firm's president, J. M. Gerstley.

The company has been supplying "relatively small quantities" of boric acid to Callery and Olin Mathieson.

Mr. Gerstley points out that "substantially less than 2 cents" of U. S. Borax's June 30 9-months earnings of $1 a share "had any connection with the high energy fuel program."

If the program had continued along without the cancellations, Mr. Gertly estimates, it would have accounted for an additional one-half to three-quarters of a cent a share for 1959 earnings. Furthermore, he added, the high energy-fuels program is not likely to "appreciably effect the company unless and until the government decides to build more plants."

Of US Borax's $47 million sales in the 9-months period ended June 30, "less than $1 million" was from the high-energy fuel program, Mr. Gerstley said.

Borax makers had been looking at the government program with a wary if not altogether skeptical eye for some time now.

Borate Fuels a Question Mark

As late as January a top level spokesman for the industry noted: "Whether the demand for borates for high-energy fuels will in fact become a matter of importance, I cannot say, and I do not know whether there is anyone presently in the government who could or would give a definite answer to this question."

This comment was made at the time when the big Callery and Olin units were already being readied for production.

Another top borax executive, following announcement of the government cancellation of its two programs, said the industry had not been banking heavily on the programs as a growing source of demand.

Intimations of the government break with its exotic fuel program were numerous. Last year, the President's planned budget indicated less emphasis on manned planes. An anonymous government official in Washington last week cited this in his interpretation of why the government cancelled-out.

Also, a possible harbinger of last week's development was the navy's cancellation last month of a $13.5 million contract with Metal Hydrides, Inc., for production of sodium borohydride, another high-energy material (OPD 7/6/59).

Other probable reasons observers suggest for last week's navy-air force move:

Borane fuels are extremely expensive, and have application for the military alone.

There have been indications that manufacture of a borane engine has been difficult because of a thick, troublesome combustion product.

No official reason has been given for the cancellations. However, Secretary of Defense Neal H. McElroy recently warned that the department intended to drop its marginal weapons program.

Word from the Pentagon last week was that the military top brass was reviewing whether to continue research on the boron compounds. (First intimation of the cancellation was a Defense Department message to congress advising the legislators that the prime contract with General Electric Company for the J93-5 engine had been cancelled. The engine was to power both the B-70 and the F-108. It is a turbo-jet with an afterburner which uses the high-energy fuels.)

A spokesman for Olin Mathieson reported the government attributed the closing out of its contract to the cancellation of the GE engine. The executive pointed out that "the effect of the decision is a substantial reduction in the energy divisions' scheduled production of high-energy fuels under an air force management program."

However, the Olin man noted, "the air force action does not affect contracts ... research, development or production of nuclear fuels or liquid and solid fuels for rocket and missile propulsion."

Monsanto's New Tack

—*Continued from page 3*

search and engineering division's research department, at Dayton, Ohio.

In addition, many of the research programs now in the laboratories of the company's organic chemicals division, Lion Oil Company and plastics division are directly related to the electrones or kindred industries.

Also, for some years, the company has carried on extensive silicon research programs at St. Louis and Dayton as well as in the facilities of its British subsidiary, Monsanto Chemicals, Ltd.

To supplement its own work in the field, Monsanto has secured a license to use the Siemens-Westinghouse process in the production of ultra-pure silicon.

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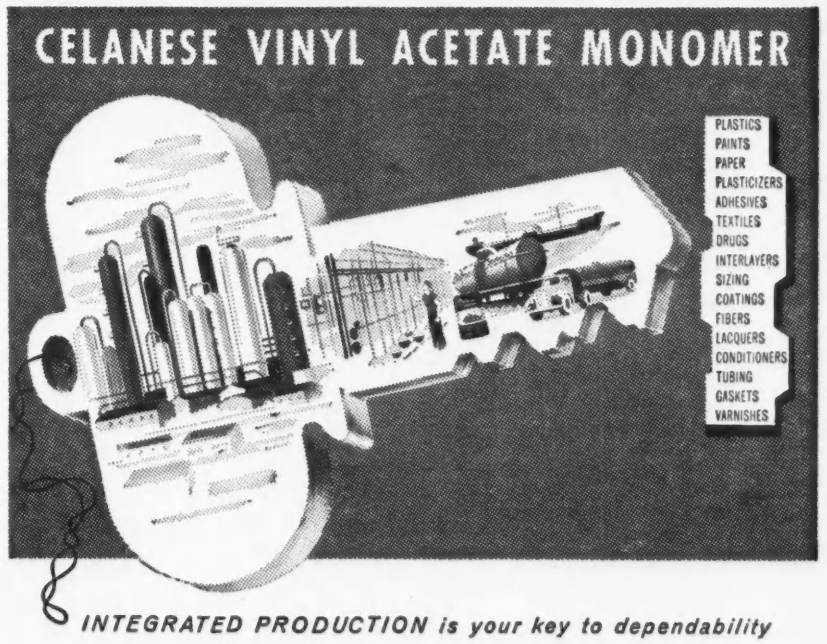

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